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AN OCCUPATIONAL PROFILE OF HOSPITAL EMPLOYMENT IN MASSACHUSETTS 1980

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Massachusetts Division of Employment Security

job market research

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AN OCCUPATIONAL PROFILE OF HOSPITAL EMPLOYMENT IN MASSACHUSETTS

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INTRODUCTION

The Occupational Employment Statistics (OES) Program, initiated in 1970, was established to address the need of planners, educators, administrators, job seekers, and researchers for current estimates of occupational employment patterns by industrial sector. The program was designed as a cooperative Federal-State effort, involving three core organizations--the Employment and Training Administration (ETA), the Bureau of Labor Statistics (BLS), and State Employment Security Agencies (SESA's). The three principal components of the program are the following: the OES survey, the industry-occupation matrix, and the projection of employment requirements. The development of an occupational profile of Massachusetts' nonagricultural wage and salary employment in its entirety takes three years to complete. The results of each of the surveys are then updated on a triennial basis.

In the past, health manpower studies have been significantly limited by occupational employment data not being readily available. The objective of this survey was to develop an occupational profile of the Massachusetts hospital industry. In addition to providing a current source of industry employment patterns, it was hoped that the information presented in this report would prove valuable in the following areas: planning and evaluation of classroom and on-the-job training programs, job development and placement of new entrants, reentrants, and individuals in career transition, establishment of a comprehensive occupation information system, and lastly, projection of future employment requirements.

OCCUPATIONAL EMPLOYMENT TRENDS

The advent of highly sophisticated equipment, instruments, and techniques for the detection, diagnosis, and treatment of physical and mental illnesses has revolutionized the health care field and resulted in a significant change in the occupational composition of the workforce. The fragmentation of health related occupations and the growing demand for workers with more specialized and technical training are two notable ramifications of the great strides which have been made in medical technology.

Around the turn of the century there were primarily three occupations in the health care field-physicians, nurses, and nurse aides and/or orderlies. As of April 1980, nearly 1 out of every 6 hospital workers was employed in one of a number of highly technical and specialized occupations.

The hospital industry (SIC 806)[1/] is composed of establishments engaged in providing: general medical and surgical services; diagnostic medical services and inpatient treatment for the mentally ill; and diagnostic services, treatment, and other hospital services for patients with specified types of illnesses, except mental. The Standard Industrial Classification System assigns codes to hospitals at the more detailed 4-digit level, according to which of the above services are performed.[2/]

The objective of this study was to develop an occupational profile of the Massachusetts hospital industry. Because we anticipated significant differences in the occupational composition of the three hospital types, it was hoped that the data would be sufficient to support the publication of staffing patterns at the detailed industry level - general medical and surgical, psychiatric, and specialty (4-digit SIC level).

The presentation of accurate and reliable occupational profiles at the 4-digit level is dependent on the employment level of the industry, and the rate and representativeness of survey response. In this survey two of the three 4-digit hospital categories, "general medical and surgical", and "psychiatric", met the stated criteria. The staffing pattern of "specialty" hospitals, however, could not be published due to insufficient response. Fortunately, when combined, the other two categories accounted for more than 90 percent of all hospital employment.

In April of 1980 hospital employment in the Commonwealth was estimated at 138,400.[3/] As a dominant and growing industrial sector, the hospital industry is vital to the future strength and expansion of the Massachusetts economy. Robert A. Chadbourne, President of Associated Industries of Massachusetts, believes that "(t)he emergence of Massachusetts as the world center of medical technology and the manufacturing of medical equipment and supplies is the most exciting and promising development on the industrial scene...."[4/] During the 1976-1985 projection period the industry is expected to achieve an annual average growth rate of 3.7 percent, nearly twice the rate estimated for the Bay State in its entirety.

Hospitals are distinguishable from other industrial sectors by special structural characteristics which typify their labor and product markets. Kenneth Arrow in his article, "Uncertainty and the Welfare Economics of Medical Care," cites the following five characteristics as special features of the industry. The irregular and unpredictable nature of demand for hospital services is the first to be mentioned. The risk of illness is not something which is easily measured, and unlike other commodities in the economy it cannot be transferred or taken on by other individuals even if deemed to be profitable. Secondly, the expected behavior of physicians contrasts sharply with the motivation typically attributed to producers of being profit maximizers. In this market knowledge is considered to be a commodity. Its value, however, is difficult to determine because of its innate qualities. The incentive to look for the best price in medical care is virtually nonexistent, both because people want to trust the recommendations of physicians, and also since insurance has become so prevalent. Approximately 90 percent of all hospital bills are paid by third parties - insurers or government.[5/] In the article, "The Economics of Moral Hazard: Comment, "Pauly cites an illustration of the prisoner's dilemma in the health care field. An insured individual is not motivated to restrain her/his use of medical services, since the costs are spread over all policyholders. The net result is that each premium will rise due to increased use. However, if an individual had to personally absorb the impact of unnecessary medical care, she/he might think twice about the additional monetary outlay which would be required. The preceding leads directly into the third characteristic to be specified, product uncertainty.

Medical care is in many ways an unknown quantity; before consuming, a patient does not know if her/his recovery will be complete, delayed, or incomplete. Fourthly, instead of prices for services rendered being determined by the market forces of supply and demand, they are often a function of income or ability to pay. The presence of different prices for the same service is yet another example of the departure of hospital product and labor markets from the workings of perfectly competitive markets. Since many hospitals are nonprofit organizations, approximately 64 percent in Massachusetts, there is little pressure from competing hospitals to be cost effective. Some individuals, however, claim that hospitals for profit are the wave of the future, and that to remain solvent and in business hospital administrators will have to seriously consider the forces of supply and demand. Proponents of this contention assert that the recent trend of administrators, instead of physicians, being selected to head hospitals substantiates this view.

Lastly, Arrow puts forth the premise that entry to occupations in the health care field has been constrained by licensing. One ramification of limited entry is the restriction of labor supply. According to a newly released DES publication, "Pilot Job Openings Survey-1980," during the period, December 1979 to June 1980, there was a persistent unmet demand for individuals trained to fill occupations specific to the health services field. The striking contrast between the overall job vacancy rate for Massachusetts and the vacancy rates of three prominent medically related occupational titles is evidence of the severe labor shortages which existed. (Estimated employment and job openings data for the three occupations were not limited to the hospital industry, but were inclusive of all industry sectors in Massachusetts.) The following table highlights this divergence in rates.

Selected Occupational Titles	Estimated Employment a/	Job Openings b/	Vacancy Rate c/
Total, All Occupations	2,189,160	39,550	1.8
Registered Nurse	42,954	2,400	5.3
Licensed Practical Nurse	17,277	910	5.0
Nurse Aide and/or Orderly	39,745	1,530	3.7

a/ Individual occupational employment represents estimated employment across all industry sectors.

b/ Job openings are the average of the number of openings on the last day of the months of December 1979, March 1980, and June 1980, across all industry sectors, except government and agriculture. (Data is excerpted from the newly released DES publication, "Pilot Job Openings Survey - 1980".)

c/ The vacancy rate is calculated by dividing the number of job openings by the sum of employment and job openings.

Why, however, were there imbalances between the demand for and supply of labor?

Working conditions and earnings, institutional structure, inefficient utilization and geographic distribution of the highly trained, and education and training requirements, are four prominent explanations advanced as to why there appears to be a shortage of qualified applicants to fill all the hospital openings which arise due to either replacement demand or growth. The disequilibrium between job opportunities and available labor is reflected in the varied education and training requirements sometimes sought by hospitals for the same job title in different locations.

> It is not uncommon for a hospital to require a high school education for a nurse's aide, for example, if it is possible to hire persons with that qualification. At the same time other hospitals in the same area may not require the high school diploma. Some health facilities are relatively inflexible in their hiring requirements, whereas others are sufficiently flexible to lower their education or training requirements when the labor market is very tight.6/

The more technical and skilled the position, the less variation in the "hiring-in" standards one would expect.

Within a hospital there is a substantial range in the levels of education and experience required of its workforce. This spectrum of backgrounds is evident in the table which follows.

Selected Occupational Titles	Ranked Employment	
	Number	Percent of Total
Total, All Occupations	138,400	100.00
Total, six-ranking occupations	67,990	49.12
Nurse, professional	31,100	22.46
Nurse aide and/or orderly	11,750	8.49
Licensed practical nurse	9,800	7.08
Secretary	5,480	3.95
Physician and/or surgeon	5,440	3.92
Maid	4,420	3.19

While licensed practical nurses are a numerically prominent occupation in the hospital industry as a whole, the vast majority of positions, more than 82 percent, are concentrated in general medical and surgical hospitals. Thus, an earlier observation concerning the share of employment involved in technical hospital activities, in many ways camouflaged the underlying divergence which exists between the occupational staffing patterns of particular "types" of hospitals. It is striking to note that while more than 1 in every 5 employees in general medical and surgical hospitals is engaged in technically related work, only 1 in 11 workers in psychiatric hospitals is similarly employed. As is revealed in the preceding illustration the occupational staffing patterns of different hospital types may vary substantially. Further, since general medical and surgical hospitals account for more than 82 percent of hospital employment in Massachusetts, an occupational profile of the hospital industry as a whole is in large measure merely going to be a reflection of this hospital's type of staffing pattern.

As is evident in the following table and pie chart, nearly 71 percent of the 138,400 wage and salary hospital jobs in Massachusetts in April of 1980 were classified in white collar fields of work. A more detailed profile of wage and salary hospital employment by major occupational category is presented in Tables 6, 7, and 8.

The high educational attainment and/or mastery of technical skills of much of the hospital workforce is captured in the striking proportion, more than 1 in 2, of positions classified as either professional or technical. Commanding nearly 34 percent of all hospital employment, professional workers accounted for approximately 46,650 positions. Not surprisingly, professional nurses comprised the largest occupational group within both the major occupational category and the industry itself. By April of 1980 nurses commanded more than 22 percent, 31,100 jobs, of the industry's employed workforce. The employment share of this occupational title alone is 2½ times that of the closest contender, nurses aides and/or orderlies.

TABLE 1

TYPE OF HOSPITAL BY MAJOR OCCUPATIONAL CATEGORY AND GROUP
PERCENT OF TOTAL
MASSACHUSETTS
1980

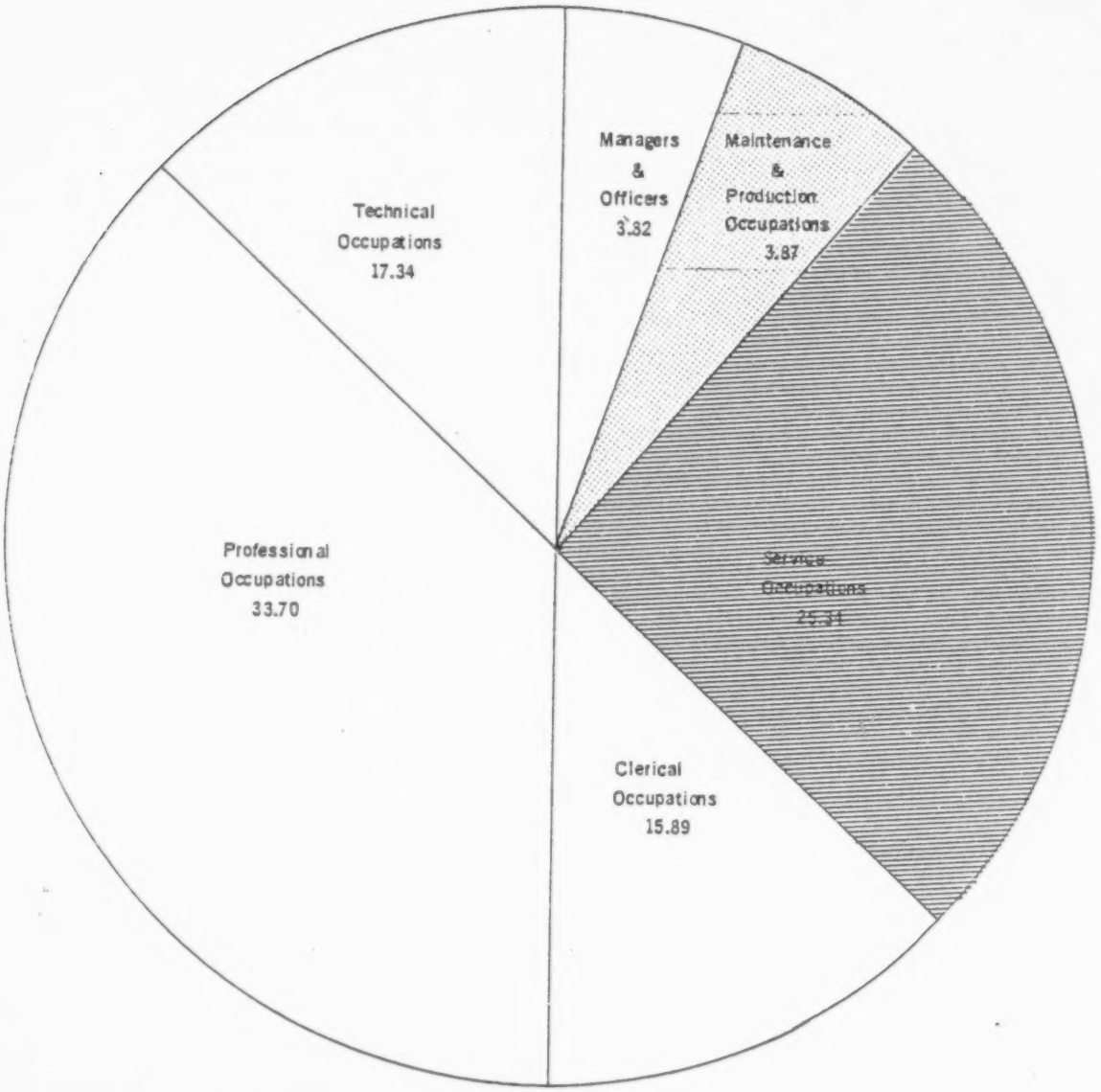
Major Occupational Category and Group	All Hospitals SIC 806 a/	General Medical Surgical SIC 8062	Psychiatric SIC 8063
TOTAL, All Occupations	138,400	113,900	11,100
Percent of Total	100.00	100.00	100.00
White Collar Workers	70.76	74.23	47.35
Managers and Officers	3.82	3.95	2.69
Professional Occupations	33.70	35.02	25.42
Technical Occupations	17.34	18.51	8.83
Clerical Occupations	15.89	16.74	10.41
Sales Occupations	.01	.01	b/
Blue Collar Workers	3.87	3.28	8.60
Maintenance and Production Occupations	3.98	3.28	8.60
Service Workers	25.34	22.45	44.00

Note: Detail may not add to totals due to rounding.

a/ SIC 806 is an aggregation of three 4-digit SIC's - 8062, 8063, and 8069. Due to insufficient response the data for 8069 could not be published separately.

b/ Less than 10 employment.

OCCUPATIONAL[a/] EMPLOYMENT SHARES
MASSACHUSETTS HOSPITALS
APRIL, 1980



TOTAL EMPLOYMENT = 38,400

White Collar =

Blue Collar =

Service =

a/ The major occupational category, sales, has not been included, since employment was less than 20.

The occupational category, technical occupations, is the second major source of white collar hospital positions. Many of these occupations

> ... were developed to relieve highly trained professionals of their less complicated and routine duties.... have emerged to meet a previously unfilled need for medical care in situations where physicians and registered nurses were unavailable... (were created by) (t)he development of sophisticated diagnostic tools and techniques for treatment... (were developed to) process the large volume of medical records generated daily in hospitals....7/

Within this major category, licensed practical nurses, medical laboratory technologists, radiologic technicians, and medical laboratory technicians were numerically the most prominent. The fragmentation of health-related occupations and the demand for workers with more specialized and technical training are most vividly observed within this major occupational category. There were more than 20 technical occupational titles, each of which represented less than 0.5 percent of employment.

In the clerical field, automation has significantly changed the nature of clerical jobs and the occupational mix which is required. "The introduction of new equipment often involves a reorganization of work flow, office procedures, and staff".8/ While computerization has virtually alleviated the need for workers performing routine tasks, the introduction of new equipment has prompted the emergence of a host of new occupations.

While some of their job duties will change, secretaries are not expected to be as greatly affected by technological innovation, primarily because of their contact with the public. Within the hospital industry the occupational title, secretary, commanded the largest share of clerical employment, accounting for nearly 5500 jobs. Secretaries are anticipated to realize the most significant job growth, nearly 5000 job openings annually, among all clerical occupations throughout the Massachusetts economy during the 1976 - 1985 projection period.

The sales occupations were the major occupational category with the smallest share of hospital employment. Only .01 percent, (approximately 20 positions), of the people in this industry were working as either sales representatives or sales clerks.

Individuals engaged in service-type activities are integral to the smooth functioning of a hospital. In April of 1980 slightly more than 1 of every 4 people employed in this industry was classified in the major occupational category services. Not unexpectantly, nurse aides and/or orderlies represented nearly 8.5 percent of the workforce, and accounted for the largest share of employment in this category. Other numerically significant occupations were maids, psychiatric aides, and kitchen helpers. It has become prevalent among some of the larger hospitals to contract out for cleaning, laundry and food services.

All blue collar jobs were classified under the major occupational category, maintenance and production occupations. Next to sales this was the second smallest category, less than 4 percent of all hospital employment. No single occupational title within this grouping accounted for more than 0.5 percent of employment.

As was alluded to earlier, an occupational profile of the hospital industry almost by definition reflects the staffing pattern of its largest component, general medical and surgical hospitals. The staffing pattern of psychiatric hospitals, however, diverges significantly from both the industry as a whole, and general medical and surgical hospitals in particular. (See following bar graph.) While almost 3 out of 4 general medical and surgical hospital workers are employed in white-collar jobs, less than 1 out of 2 psychiatric employees are similarly engaged.

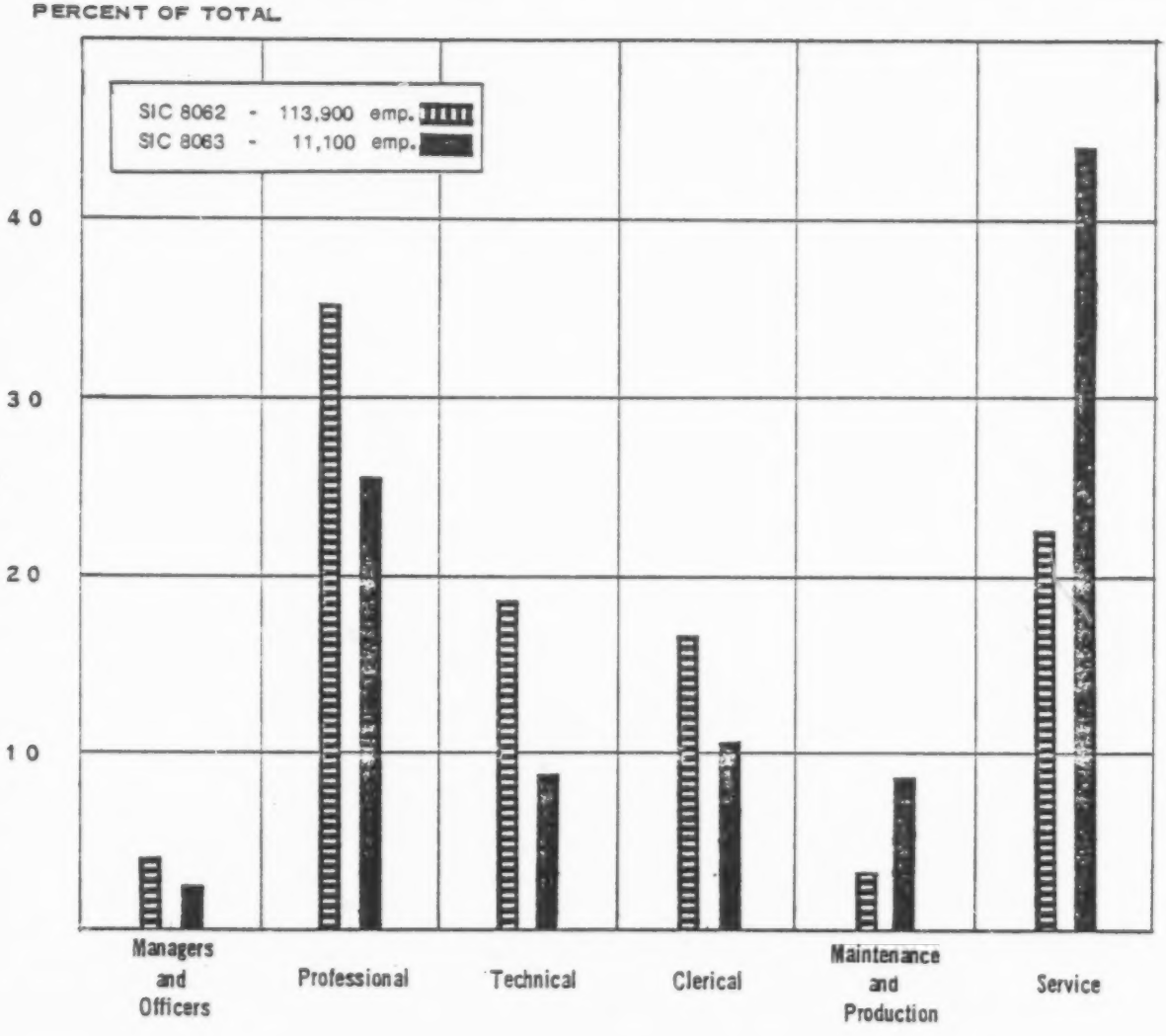
About 44 percent of the psychiatric hospital labor force is engaged in service-type activities, as compared to just more than 22 percent of those working in general medical and surgical hospitals. Numerically the most prominent occupation in psychiatric hospitals is the service occupation, psychiatric aide. In April of 1980 there were approximately 3000 positions in this occupation, accounting for more than 27 percent of all employment in SIC 8063.

Similarly, blue collar workers engaged in maintenance and production activities are more prevalent in SIC 8063 where they commanded almost a 9 percent employment share, as opposed to just more than 3 percent of the jobs in SIC 8062. The final divergence, to be commented upon, is the number of technical workers which each hospital type employed. While more than 18 percent of general medical and surgical workers filled positions requiring technical training, less than 9 percent of the jobs in psychiatric hospitals required such a background.

In addition to divergent staffing patterns, these two hospital types vary considerably in the average size of their establishments and in the most prevalent type of ownership. Nearly 67 percent of the 118 general medical and surgical hospitals in Massachusetts had employment levels of more than 500, with none smaller than 50. Psychiatric hospitals on the other hand, were predominantly mid-sized. The majority of the establishments had work forces of approximately 100 to 499 people. Another interesting contrast between the two hospital types is the finding that the vast majority of general medical and surgical hospitals are nonprofit, while psychiatric hospitals tend to be state-run.

During the past 20 years there have been significant changes in the delivery of mental health services in this country. In 1965 the Federal government passed the Community Mental Health Act which set forth that states should provide mental health services right in the community. The following year the Massachusetts government passed a similar law. Until the mid-70's the concept was only adopted on a very small scale, in scattered communities across the Commonwealth. Under the leadership of Commissioner Okun, a network of community-oriented and based mental health programs began to be established. Outpatient mental health centers and community residences provided both a protective environment for newly released patients of psychiatric hospitals, and also the

OCCUPATIONAL STAFFING PATTERN
BY MAJOR OCCUPATIONAL CATEGORY
GENERAL-MEDICAL AND SURGICAL HOSPITALS AND PSYCHIATRIC HOSPITALS
MASSACHUSETTS
APRIL, 1980



1/ The major occupational category, sales, has not been shown, since employment was less than 20.

accessibility of mental health services to people in their own community. Massachusetts was considered to be a leader in deinstitutionalization by the other states in the Union. While the system is now half-way in place, it does not appear likely that appropriate patients in the remaining psychiatric hospitals will be deinstitutionalized in the near future. Anticipated cutbacks in funding are expected to slowdown the mental health reform movement, and might even necessitate the closing of some existing community programs.

Another Congressional piece of legislation to significantly affect the field of health services was the Health Planning and Resource Development Act of 1974. In Massachusetts, federally-funded regional Health Planning Councils were established under the jurisdiction of the Department of Health and Human Services, to make recommendations to hospitals on ways to improve and make more cost effective the delivery of medical services. One example of this occurred in January of 1981 when the North Shore Health Planning Council recommended that the maternity wards of three North Shore Hospitals be consolidated. One of the Council's primary objectives was to reduce the costs of health care to area residents. The Health Planning Council

> ... suggested that the three hospitals find a way on their own to combine Maternity service at two of the hospitals. If the hospitals are unable to come up with an acceptable consolidation plan, the council will assume the task. 9/

Partly in response to increasing hospital costs, there has been a movement throughout the Bay State to provide services previously performed in hospitals in outpatient care facilities, neighborhood health centers, extended care facilities, and health maintenance organizations.

As mentioned previously, during the 1976 -1985 projection period the hospital industry is expected to post an annual average growth rate of 3.7 percent, nearly twice the rate estimated for the Commonwealth. Continued employment growth is anticipated given the following observations: rapid development in technology requires specially trained workers; a growing share of the population will be older people; education about health care has led to an increased demand for quality and quantity of services; consultations and lab tests have become more prevalent with the advent of defensive medicine; and, the possible passage of a national health insurance program is expected to have a dramatic impact on the job level of the health care field. The growth and continued development of the hospital industry is integral to the future strength and expansion of the Massachusetts economy and the well-being of its workforce.

METHODOLOGY

Survey

During the Spring of 1980 a questionnaire was mailed to all nongovernment and state and local government hospitals. A second mailout (first follow-up) was conducted approximately a month after the original mailing. Personal visits were scheduled for many of the large employment hospitals, and also for selected critical nonrespondents. The visited hospitals represented 29 percent of the received responses. The rate of response among these units, 80.6 percent, was slightly higher than that for the overall survey. In addition, telephone calls were made to hospitals where data were critically needed for calculating valid estimates. The third and final mail-out was then carried out in the early fall. By December of 1980, 78.3 percent of the institutions had responded to the questionnaire. (A copy of the questionnaire and instructions for completion is included in Appendix).

The study is concerned with employees on hospital payrolls. It does not include the self-employed, students, volunteers, or other unpaid personnel. The employment count represents all wage and salary personnel, whether full-time or part-time; no equivalent positions were calculated. Hospitals were requested to report individuals who hold more than one position or responsibility in the occupation requiring the most skill. Personnel, who are regular employees but were absent during the reporting week because of sick leave, vacation or attendance at a short-term training program, institute or convention, were also counted.

Universe [10/]

In April of 1980 the universe of private, nonprofit, and state and local government hospitals in Massachusetts was surveyed, as part of the ongoing Occupational Employment Statistics Program. The universe contained 175 institutions, which were distributed by type ownership, by size class [11/] and by type hospital as shown in the tables which follows.

TABLE 2

NUMBER OF INSTITUTIONS AND ESTIMATED TOTAL EMPLOYMENT
BY TYPE OWNERSHIP
MASSACHUSETTS HOSPITALS
APRIL 1980

TYPE OWNERSHIP	All Hospitals SIC 806	General Medical Surgical SIC 8062	Psychiatric SIC 8063	Specialty SIC 8069
	NUMBER OF INSTITUTIONS			
TOTAL	175	118	26	31
Nongovernmental	132	101	10	21
Nonprofit	112	95	3	14
Profit	20	6	7	7
Governmental	43	17	16	10
State	22	6	16	0
Local	21	11	0	10
	ESTIMATED TOTAL EMPLOYMENT */			
TOTAL	138,400	113,900	11,100	13,400
Nongovernmental	113,800	100,900	2,800	10,000
Nonprofit	109,100	99,200	1,700	8,200
Profit	4,700	1,700	1,100	1,900
Governmental	24,600	13,000	8,300	3,300
State	12,000	3,700	8,300	0
Local	12,600	9,300	0	3,300

*/ Employment estimates rounded to nearest 100.

TABLE 3

NUMBER OF INSTITUTIONS AND ESTIMATED TOTAL EMPLOYMENT
BY SIZE CLASS
MASSACHUSETTS HOSPITALS
APRIL 1980

SIZE CLASS	All Hospitals SIC 806	General Medical Surgical SIC 8062	Psychiatric SIC 8063	Specialty SIC 8069
	NUMBER OF INSTITUTIONS			
TOTAL	175	118	26	31
Under 20	0	0	0	0
20-49	1	0	1	0
50-99	6	4	1	1
100-249	34	12	8	14
250-499	39	23	8	8
500-999	51	39	6	6
More than 1000	44	40	2	2
	ESTIMATED TOTAL EMPLOYMENT */			
TOTAL	138,400	113,900	11,100	13,400
Under 20	0	0	0	0
20-49	40	0	40	0
50-99	450	300	100	60
100-249	5,840	2,440	1,270	2,130
250-499	13,530	7,520	2,730	3,280
500-999	35,490	27,490	4,000	4,010
More than 1000	83,080	76,180	2,990	3,930

*/ Employment estimates rounded to nearest 10. Total employment estimate rounded to nearest 100.

Response

The survey response rate at the closing date for data collection was 78.3 percent of the units and 76.8 percent of estimated total employment.

TABLE 4

QUESTIONNAIRES MAILED AND RESPONSE RATE
BY NUMBER OF INSTITUTIONS AND EMPLOYMENT
MASSACHUSETTS HOSPITALS
APRIL 1980

MAILING	All Hospitals SIC 806	General Medical Surgical SIC 8062	Psychiatric SIC 8063	Specialty SIC 8069
	NUMBER OF INSTITUTIONS			
Mailed	175	118	26	31
Received	137	95	18	24
Response Rate a/	78.3	80.5	69.2	77.4
	EMPLOYMENT b/ IN INSTITUTIONS			
Mailed	138,400	113,900	11,100	13,400
Received	106,340	90,560	8,670	7,110
Response Rate a/	76.8	79.5	78.0	53.0

a/ Response rates calculated from unrounded numbers.

b/ Employment estimates rounded to nearest 100.

TABLE 5

NUMBER AND RATE OF RESPONSE TO QUESTIONNAIRE
BY TYPE SERVICE, BY SIZE CLASS
MASSACHUSETTS HOSPITALS
APRIL 1980

SIZE CLASS	All Hospitals SIC 806		General Medical And Surgical SIC 8062		Psychiatric SIC 8063		Specialty SIC 8069	
	Mailed	Response Rate	Mailed	Response Rate	Mailed	Response Rate	Mailed	Response Rate
	Number of Institutions							
TOTAL	175	78.3	118	80.5	26	69.2	31	77.4
Under 20	0	0	0	0	0	0	0	0
20-49	1	0	0	0	1	0	0	0
50-99	6	100.0	4	100.0	1	100.0	1	100.0
100-249	34	76.5	12	75.0	8	75.0	14	78.6
250-499	39	84.6	23	82.6	8	50.0	8	a/
500-999	51	74.5	39	79.5	6	83.3	6	33.3
1,000 or more	44	77.3	40	80.0	2	100.0	2	0
	Employment b/							
TOTAL	138,400	76.8	113,900	79.5	11,120	78.0	13,410	53.0
Under 20	0	0	0	0	0	0	0	0
20-49	40	0	0	0	40	0	0	0
50-99	450	a/	300	a/	100	92.7	60	100.0
100-249	5,840	78.1	2,440	70.7	1,270	86.4	2,130	81.6
250-499	13,530	85.9	7,520	82.8	2,730	52.0	3,280	a/
500-999	35,490	74.1	27,490	79.6	4,000	77.3	4,010	33.3
1,000 or more	83,080	76.3	76,160	79.3	2,990	99.5	3,930	0

a/ Response rate was greater than 100 percent. One likely explanation is that although a reference month was given for the survey, there was no way of controlling for individuals who completed the survey for a different point in time.

b/ Estimated employment rounded to nearest 10. Estimated total employment rounded to nearest 100.

Estimating Procedure

All usable responses were stratified into seven size classes, by type of service - general medical and surgical (SIC 8062), psychiatric (SIC 8063), and specialty (SIC 8069). Reported total employment, or summed occupational employment, from each usable questionnaire was multiplied by the weight assigned each establishment during sample selection. Since, in this instance, the universe was surveyed, all establishments were assigned a weight of one. Reported total employment figures for each establishment were then summed by size class and industry. The aggregated reported total employment figure for each size class and designated industry was then divided into the corresponding employment figure obtained from the Report of Employment and Wages (ES-202) for the reference month of the survey. The result of this procedure is known as the benchmark factor. These factors were then applied to their corresponding cells of collected occupational data, thus accounting to some degree for nonresponse. These occupational estimates were then summed across size classes to obtain industry totals, and then across 4 digit industries to acquire a 3 digit total. Lastly, occupational profiles were constructed from the aggregated data for the hospital industry in general, and general medical and surgical and psychiatric hospitals, in particular.

Limitations

Sampling Errors 12/

Sampling error represents an estimate of the possible difference between the results derived from a sample and that which would have been obtained from an enumeration of the universe. It is expressed as a range about the estimate to which we can attach a degree of probability that the range will cover the true population value. In this survey sampling error is expressed in terms of the relative error. Relative error is the sampling error divided by the estimate and then multiplied by 100. Thus at one standard error level we can then say that we are 68 percent sure that the true value of the estimate lies within the relative percent shown. Likewise at a two standard deviation level the probability would be 95 percent that the results of collecting identical information from the entire population would not differ by more than twice the relative error percent given.

Nonsampling Errors 13/

Another factor which affects precision is nonsampling error. Nonsampling error results from external factors in a survey rather than from the fact that a sampling technique was used. Examples of nonsampling error: response errors, processing errors, computational errors, nonresponses if they are unlike responses etc.

In this industry, perhaps more so than others, there is a considerable degree of overlapping functions among the various occupational titles. Thus, the instruction to place individuals who hold more than one position or responsibility in the occupation requiring the most skill may at times have been complicated to determine. A related difficulty,

to which clerical occupations appear especially prone, is that individuals performing the same job duties and responsibilities, but in different hospitals, may be counted under similar but not identical occupational titles. In conclusion, unlike "sampling error" there is no general way of computing the impact of "nonsampling" error without in effect examining each type of nonsampling error separately, in order to determine its specific impact on estimates.

TABLE 6

OCCUPATIONAL PROFILE OF WAGE AND SALARY EMPLOYMENT
IN HOSPITALS (SIC 806)
MASSACHUSETTS

Reference Date April 1980

OCCUPATION	EMPLOYMENT		
	Number	Percent Of Total	Relative Error Percent
TOTAL, All Wage & Salary Emp. .	138,400	100.00	N/A
Managers and Officers	5,300	3.82	4
Professional Occupations	46,650	33.70	N/A
Civil Engineer	20	.01	19
Industrial Engineer	30	.02	13
Mechanical Engineer	60	.04	24
All Other Engineers	50	.03	N/A
Chemist	10	.01	17
Physicist	20	.01	27
Biological Scientist	90	.06	28
Medical Scientist	120	.08	10
Psychologist	360	.25	13
Sociologist	30	.02	31
All Other Social Scientists . . .	120	.08	20
Systems Analyst, EDP	220	.15	17
Purchasing Agent and/or Buyer . .	260	.18	4
Accountants and Auditors	480	.34	3
Caseworker	1,380	.99	4
Clergy	140	.09	7
Dentist	50	.03	19
Dietician and/or Nutritionist . .	570	.41	3
Lawyer	10	.01	16
Librarian, Professional	340	.24	11
Nurse, Professional	31,100	22.46	2
Occupational Therapist	430	.31	8
Personnel & Labor Relations Specialist	330	.23	3
Pharmacist	810	.58	3
Physical Therapist	870	.63	5
Physician and/or Surgeon	5,440	3.92	11
Podiatrist	30	.01	22
All Other Therapists	280	.20	16
Manual Arts, Therapists	220	.15	15
Speech Pathologist and/or Audiologist	210	.15	10
Audiometrist	10	*	22
Respiratory Therapist	1,430	1.03	4
All Other Professional Workers . .	1,140	.82	N/A

SIC 806 (continued)

OCCUPATION	EMPLOYMENT		
	Number	Percent Of Total	Relative Error Percent
Technical Occupations	24,010	17.34	N/A
Computer Programmer	140	.10	14
Drafter	60	.04	35
Electrical & Electronic Technicians	30	.01	20
All Other Engineering Technicians	10	*	36
Biological Science Technician	30	.02	25
All Other Science Technicians	20	.01	48
Dental Assistant	40	.03	14
Licensed Practical Nurse	9,800	7.08	4
Physicians Assistant	160	.11	15
Radiation Monitor	10	*	24
Surgical Technician	880	.63	5
Radiologic Technician	1,760	1.26	4
Pharmacy Helper	690	.49	5
Medical-Record Librarian	240	.17	7
Dental Hygienist	30	.02	13
Medical Laboratory Technologist	2,730	1.96	7
Biochemistry Technologist	410	.29	11
Microbiology Technologist	330	.23	9
Cytotechnologist	100	.07	7
Histologic Technologist	220	.15	9
Prosthetist-Orthotist	40	.02	38
Medical Laboratory Technician	1,490	1.07	8
Electrocardiograph Technician	640	.46	3
Electroencephalograph Technician	160	.11	5
Dietetic Technician	360	.25	6
Blood Bank Technology Specialist	700	.50	8
Physical Therapy Assistant	420	.30	9
Radiologic Technologist and/or Nuclear Medical Technologist	950	.68	6
All Other Medical and Dental Technologists and Technicians	1,420	1.02	N/A
All Other Technicians	160	.11	24
Service Occupations	35,080	25.34	N/A
Supervisor Nonworking Service	430	.30	6
Nurse Aide and/or Orderly	11,750	8.49	4
Psychiatric Aide	3,460	2.49	17
Orthopedic-Cast Specialist	40	.03	14
Child Care Worker	100	.07	23
Social Service Aide	100	.07	12
Medical Assistant	210	.15	22
Occupational Therapy Assistant	170	.12	14
Maid	4,420	3.19	4
Housekeeper	1,240	.89	11
All Other Janitors, Porters and Cleaners	2,600	1.87	5

SIC 806 (continued)

OCCUPATION	EMPLOYMENT		
	Number	Percent Of Total	Relative Error Percent
Guards and Doorkeepers	1,110	.79	4
Baker, Bread and/or Pastry	100	.07	6
Dining Room Attendant	810	.58	10
Butcher and/or Meat Cutter	20	.01	14
Kitchen Helper	2,960	2.13	6
Waiter or Waitress	220	.16	20
Counter Attendant	1,190	.85	11
Cook, Short Order	150	.10	9
Pantry, Sandwich and/or Coffee Maker	160	.11	8
Cook, Institution	800	.57	4
All Other Food Service Workers	2,030	1.46	7
All Other Service Workers	1,020	.73	14
Maintenance and Production Occupations	5,360	3.87	N/A
Supervisor, Nonworking	210	.14	8
Mechanic, Automotive	40	.02	17
Electromedical Equipment Repairer	50	.03	12
Mechanic, Maintenance	170	.12	11
All Other Mechanics and Repairers	90	.06	15
Washer, Machine and/or Starcher	260	.19	10
Dry-Cleaning-Machine Operator	20	.01	34
Laundry Presser, Machine	610	.44	9
Truck Driver	190	.13	10
Carpenter	390	.28	4
Delivery and Route Worker	30	.02	22
Electrician	270	.19	4
Machinist	60	.03	17
Maintenance Repairer, General Utility	520	.37	7
Helper, Trades	440	.31	8
Order Filler	20	.01	29
Painter, Maintenance	340	.24	4
Plumber and/or Pipefitter	200	.14	5
Custom Sewer	100	.07	8
Stationary Boiler Firer	370	.26	5
Stationary Engineer	220	.15	7
Welder and/or Flamecutter	30	.02	18
Gardeners and Groundskeepers	250	.17	6
Ambulance Driver and/or Attendant	20	.01	26
All Other Skilled Craft and Kindred Workers	130	.09	N/A
All Other Operatives and Semiskilled Workers	130	.09	N/A
All Other Laborers and Unskilled Workers	210	.14	N/A

SIC 806 (continued)

OCCUPATION	EMPLOYMENT		
	Number	Percent Of Total	Relative Error Percent
Clerical Occupations	22,000	15.89	N/A
Clerical Supervisor	670	.48	9
Bookkeeping and/or Billing Machine Operator	270	.19	13
Computer Operator	190	.13	8
Keypunch Operator	480	.34	4
Peripheral EDP Equipment Operator	40	.02	26
All Other Office Machine Operators	40	.02	15
Stenographer	730	.52	6
Accounting Clerk	530	.38	8
Bookkeeper, Hand	200	.14	8
Cashier	440	.31	3
File Clerk	1,170	.84	7
General Clerk, Office	2,440	1.76	10
Library Assistant	110	.08	8
Insurance Clerk Medical	930	.67	6
Order Clerk	160	.11	14
Payroll and/or Timekeeping Clerk	320	.23	5
Personnel Clerk	230	.16	3
Procurement Clerk	150	.10	6
Receptionist	1,400	1.01	10
Secretary	5,480	3.95	9
Statistical Clerk	360	.25	9
Switchboard Operator	1,030	.74	4
Switchboard Operator-Receptionist	330	.23	7
Typist	1,990	1.43	7
All Other Office Clerical Workers	1,180	.85	11
Production Clerk and/or Coordinator	30	.02	19
Shipping Packer	60	.04	19
Shipping and/or Receiving Clerk	170	.11	8
Stock Clerk	530	.37	5
Dispatcher, Police, Fire and Ambulance	50	.03	26
All Other Plant Clerical Workers	300	.21	19
Sales Occupations	20	.01	N/A

N/A Relative Error Not Available

Detail may not add to totals due to rounding.

Totals and percentages are calculated from unrounded numbers.

* Less than .01 percent.

TABLE 7

OCCUPATIONAL PROFILE OF WAGE AND SALARY EMPLOYMENT
IN GENERAL MEDICAL AND SURGICAL HOSPITALS (SIC 8062)
MASSACHUSETTS

Reference Date April 1980

OCCUPATION	EMPLOYMENT		
	Number	Percent Of Total	Relative Error Percent
TOTAL, All Wage and Salary Emp.	113,900	100.00	N/A
Managers and Officers	4,510	3.95	4
Professional Occupations	39,900	35.02	N/A
Industrial Engineer	30	.02	13
Mechanical Engineer	50	.04	25
All Other Engineers	50	.04	N/A
Chemist	10	*	18
Physicist	20	.01	25
Biological Scientist	40	.03	33
Medical Scientist	110	.09	9
Psychologist	130	.11	15
All Other Social Scientists	60	.04	N/A
Systems Analyst, EDP	210	.17	16
Purchasing Agent and/or Buyer	210	.18	4
Accountants and Auditors	390	.34	3
Caseworker	910	.80	5
Clergy	90	.07	9
Dentist	30	.02	26
Dietitian and/or Nutritionist	490	.43	3
Lawyer	10	*	16
Librarian, Professional	290	.25	11
Nurse, Professional	27,520	24.15	1
Occupational Therapist	230	.19	12
Personnel and Labor Relations Specialist	270	.23	3
Pharmacist	700	.61	3
Physical Therapist	720	.62	5
Physician and/or Surgeon	4,560	4.09	12
Podiatrist	20	.01	23
All Other Therapists	160	.13	19
Manual-Arts, Therapist	60	.05	11
Speech Pathologist and/or Audiologist	150	.13	11
Respiratory Therapist	1,320	1.15	4
All Other Professional Workers	990	.86	N/A
Technical Occupations	21,090	18.51	N/A
Computer Programmer	130	.11	14
Drafter	60	.05	34

SIC 8062 (continued)

OCCUPATION	EMPLOYMENT		
	Number	Percent Of Total	Relative Error Percent
Electrical & Electronic Technicians	20	.02	19
Biological Science Technician	30	.02	27
All Other Science Technicians	20	.01	45
Dental Assistant	30	.02	15
Licensed Practical Nurse	8,070	7.08	4
Physician's Assistant	130	.11	15
Radiation Monitor	10	*	23
Surgical Technician	840	.73	5
Radiological Technician	1,630	1.43	4
Pharmacy Helper	640	.56	4
Medical Record Librarian	180	.15	8
Dental Hygienist	30	.02	12
Medical Lab Technologist	2,560	2.24	6
Biochemistry Technologist	380	.33	11
Microbiology Technologist	300	.26	9
Cytotechnologist	100	.08	7
Histologic Technologist	200	.17	8
Prosthetist-Orthotist	30	.02	40
Medical Lab Technician	1,350	1.18	7
Electrocardiograph Technician	590	.52	3
Electroencephalograph Technician	130	.11	4
Dietetic Technician	330	.29	6
Blood Bank Technology Specialist	620	.54	7
Physical Therapy Assistant	350	.30	9
Radiologic and/or Nuclear Medical Technologist	900	.78	6
All Other Medical and Dental Technologists and Technicians	1,300	1.13	N/A
All Other Technicians	130	.11	N/A
Service Occupations	25,580	22.45	N/A
Supervisor, Nonworking-Service	370	.32	6
Nurse Aide and/or Orderly	9,220	8.09	4
Psychiatric Aide	250	.21	14
Orthopedic-Cast Specialist	40	.03	14
Child Care Worker	30	.02	17
Social Service Aide	50	.04	13
Medical Assistant	200	.17	21
Occupational Therapy Aide	70	.05	22
Maid	3,830	3.35	3
All Other Janitors, Porters and Cleaners	2,130	1.87	5
Guards and Doorkeepers	890	.78	4
Baker, Bread and/or Pastry	70	.06	7
Dining Room Attendant	570	.50	11
Butcher and/or Meat Cutter	10	*	18
Kitchen Helper	2,280	1.99	7
Waiter or Waitress	180	.15	22

SIC 8062 (continued)

OCCUPATION	EMPLOYMENT		
	Number	Percent Of Total	Relative Error Percent
Counter Attendant	1,020	.89	11
Cook, Short Order	110	.09	10
Pantry, Sandwich and/or Coffee Maker	130	.11	8
Cook, Institution	530	.46	4
Housekeeper	890	.78	11
All Other Food Service Workers	1,780	1.56	7
All Other Service Workers	930	.81	14
Maintenance and Production Occupations	3,740	3.28	N/A
Supervisor, Nonworking	140	.12	9
Mechanic, Automotive	10	*	15
Electromedical Equipment Repairer	50	.04	12
Mechanic, Maintenance	110	.09	11
All Other Mechanics and Repairers	70	.06	16
Washer, Machine and/or Starcher	230	.19	10
Dry-Cleaning-Machine Operator	20	.01	31
Laundry Presser, Machine	470	.41	10
Truck Driver	80	.06	11
Carpenter	260	.23	5
Delivery and/or Route Worker	30	.02	23
Electrician	200	.17	4
Machinist	40	.03	19
Maintenance Repairer, General Utility	420	.36	7
Helper, Trades	300	.26	9
Order Filler	20	.01	28
Painter Maintenance	230	.20	4
Plumber and/or Pipefitter	130	.11	6
Custom Sewer	70	.05	10
Stationary Boiler Firer	250	.21	6
Stationary Engineer	120	.10	10
Welder and/or Flamecutter	20	.01	18
Gardeners and Groundskeepers	160	.13	7
All Other Skilled Craft and Kindred Workers	80	.07	N/A
All Other Operatives and Semi-skilled Workers	110	.10	N/A
All Other Laborers and Unskilled Workers	130	.11	15
Clerical Occupations	19,070	16.74	N/A
Clerical Supervisor, Office or Plant	600	.52	8
Bookkeeping and/or Billing Machine Operator	240	.21	12
Computer Operator	170	.15	7

SIC 8062 (continued)

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Keypunch Operator	450	.39	4
Peripheral EDP Equipment Operator	40	.03	23
All Other Office Machine Operators	30	.02	15
Stenographer	590	.51	7
Accounting Clerk	460	.40	8
Bookkeeper, Hand	130	.11	9
Cashier	380	.33	3
File Clerk	1,080	.94	7
General Clerk, Office	2,180	1.91	10
Library Assistant	100	.08	8
Insurance Clerk, Medical	850	.74	6
Order Clerk	150	.13	13
Payroll and/or Timekeeping Clerk	240	.20	5
Personnel Clerk	170	.14	4
Procurement Clerk	100	.09	6
Receptionist	1,300	1.14	10
Secretary	4,830	4.23	9
Statistical Clerk	310	.27	9
Switchboard Operator	840	.73	4
Switchboard Operator-Receptionist	250	.22	7
Typist	1,640	1.44	8
All Other Office Clerical Workers	990	.87	12
Production Clerk and/or Coordinator	30	.02	17
Shipping Packer	50	.04	20
Shipping and/or Receiving Clerk	150	.12	7
Stock Clerk, Stockroom	440	.38	5
All Other Plant Clerical Workers	290	.25	N/A
Sales Occupations	20	.01	N/A

N/A Relative Error Not Available

Detail may not add to totals due to rounding.

Totals and percentages are calculated from unrounded numbers.

* Less than .01 percent.

TABLE 8

OCCUPATIONAL PROFILE OF WAGE AND SALARY EMPLOYMENT
IN PSYCHIATRIC HOSPITALS (SIC 8063)
MASSACHUSETTS

Reference Date April 1980

OCCUPATION	EMPLOYMENT		
	Number	Percent Of Total	Relative Error Percent
TOTAL, All Wage and Salary Emp.	11,100	100.00	N/A
Managers and Officers	300	2.69	11
Professional Occupations	2,820	25.42	N/A
Biological Scientist	30	.26	8
Psychologist	230	2.04	11
Sociologist	20	.19	37
All Other Social Scientists	60	.56	18
Purchasing Agent and/or Buyer	30	.22	9
Accountants and Auditors	40	.34	14
Caseworker	330	2.95	9
Clergy	30	.25	14
Dietitian and/or Nutritionist	30	.24	9
Librarian, Professional	30	.23	11
Nurse, Professional	1,220	10.95	4
Occupational Therapist	100	9.92	10
Personnel and Labor Relations Specialist	30	.23	10
Pharmacist	50	.41	7
Physical Therapist	10	.12	26
Physician and/or Surgeon	340	3.06	9
All Other Therapists	70	.65	13
Manual Arts, Therapist	90	.84	7
All Other Professional Workers	100	.85	N/A
Technical Occupations	980	8.83	N/A
Licensed Practical Nurse	780	6.96	9
Radiologic Technician	30	.23	26
Pharmacy Helper	10	.09	21
Medical Record Librarian	30	.26	13
Biochemistry Technologist	10	.09	49
Medical Lab Technician	40	.36	13
Physical Therapy Assistant	20	.15	9
All Other Technicians	70	.63	N/A
Service Occupations	4,890	44.00	N/A
Supervisor, Nonworking-Service	20	.17	23
Nurse Aide and/or Orderly	260	2.32	35
Psychiatric Aide	3,030	27.26	4
Social Service Aide	40	.35	20
Occupational Therapy Assistant	70	.65	12

SIC 8063 (continued)

OCCUPATION	EMPLOYMENT		
	Number	Percent Of Total	Relative Error Percent
Maid	230	2.05	12
All Other Janitors, Porters and Cleaners	180	1.62	11
Guards and Doorkeepers	100	.89	11
Housekeeper	170	1.54	6
Baker, Bread and/or Pastry	20	.17	17
Dining Room Attendant	150	1.37	19
Kitchen Helper	320	2.85	16
Waiter or Waitress	10	.10	86
Counter Attendant	70	.59	9
Cook, Institution	160	1.43	5
All Other Food Service Workers	40	.33	N/A
All Other Service Workers	20	.17	N/A
Maintenance and Production Occupations	960	8.60	N/A
Supervisor, Nonworking	30	.26	13
Maintenance Repairer-General Utility	40	.32	22
Helper, Trades	110	.99	12
Mechanic, Automotive	30	.30	37
Mechanic, Maintenance	50	.48	18
Welder and Flamecutter	10	.08	50
Electrician	40	.36	8
Carpenter	90	.80	11
Painter, Maintenance	70	.66	10
Plumber and/or Pipefitter	50	.48	15
Custom Sewer	20	.16	19
Stationary Boiler Firer	50	.48	15
Stationary Engineer	70	.59	13
Truck Driver	100	.87	7
Laundry Presser, Machine	20	.17	38
Gardeners and Groundskeepers	60	.53	11
Ambulance Driver and/or Attendant	10	.10	37
All Other Skilled Craft and Kindred Workers	30	.29	N/A
All Other Operatives and Semi-skilled Workers	20	.17	N/A
All Other Laborers and Unskilled Workers	40	.39	N/A
Clerical Occupations	1,160	10.41	N/A
Clerical Supervisor, Office or Plant	30	.24	22
Bookkeeping and/or Billing Machine Operator	10	.12	35
Keypunch Operator	10	.12	36
Stenographer	70	.59	14
Accounting Clerk	10	.09	25
Bookkeeper, Hand	40	.34	16
Cashier	20	.19	15
File Clerk	30	.23	20

SIC 8063 (continued)

OCCUPATION	EMPLOYMENT		
	Number	Percent Of Total	Relative Error Percent
General Clerk, Office	110	.96	35
Library Assistant	10	.08	13
Insurance Clerk, Medical	30	.26	9
Payroll and/or Timekeeping Clerk	60	.53	9
Personnel Clerk	40	.33	10
Procurement Clerk	30	.25	17
Receptionist	20	.13	16
Secretary	220	1.96	9
Statistical Clerk	10	.10	16
Switchboard Operator	70	.63	12
Switchboard Operator-Receptionist	50	.42	17
Typist	180	1.60	13
Stock Clerk, Stockroom	40	.31	13
Dispatcher, Police, Fire and Ambulance	30	.26	24
All Other Clerical	60	.56	N/A

N/A Relative Error Not Available

Detail may not add to totals due to rounding.

Totals and percentages are calculated from unrounded numbers.

TABLE 9

RANKED MEDICAL OCCUPATIONAL EMPLOYMENT
MASSACHUSETTS HOSPITALS (SIC 806)
APRIL 1980

OCCUPATIONAL TITLE	Estimated Employment */	Percent of Total Employment
TOTAL, All Occupations	138,400	100.00
Nurse, Professional	31,100	22.46
Nurses Aides and/or Orderly	11,750	8.49
Licensed Practical Nurse	9,800	7.08
Physician and/or Surgeon	5,440	3.92
Psychiatric Aide	3,460	2.49
Medical Laboratory Technologist	2,730	1.96
Radiologic Technician	1,760	1.26
Medical Laboratory Technician	1,490	1.07
Respiratory Therapist	1,430	1.03

*/ Estimated employment rounded to nearest 10. Estimated total employment rounded to nearest 100.

FOOTNOTES

1/ The Standard Industrial Classification (SIC) was developed for use in the classification of establishments by the type of activity in which they are engaged. Industry figures in this publication are all based upon the 1972 SIC system.

2/ The three 4-digit components of the hospital industry are the following: general medical and surgical hospitals (SIC 8062), psychiatric hospitals (SIC 8063), and specialty hospitals (SIC 8069).

3/ Estimated employment was calculated based on the nonagricultural wage and salary series available from the DES report on Employment and Wages (ES-202) for April 1980.

4/ Robert A. Chadbourne, "Medicine and Industry," Industry, 42 (October 1977), 11.

5/ "Massachusetts Hospitals exempt from Cost Containment," New England Business, 1, November 1, 1979, p. 10.

6/ Harold M. Goldstein and Morris A. Horowitz, Health Personnel (Germantown, Maryland: Aspen Systems Corporation, 1977), p. 62-63.

7/ Occupational Outlook Handbook, U. S. Department of Labor, Bureau of Labor Statistics, 1980-81 Edition, p. 381.

8/ Occupational Outlook Handbook, U. S. Department of Labor, Bureau of Labor Statistics, 1980-81 Edition, p. 78.

9/ Ken Powers, "Merger of Maternity Units Urged," The Herald American, January 6, 1981, sec. A, p. 7.

10/ Includes all institutions classified as hospitals by the Standard Industrial Classification System, with the exception of those which are federally administered.

11/ Similar size establishments are grouped together into size classes based on their total employment. For estimating purposes, the smallest three size classes, all establishments with less than 20 employees, are collapsed together.

SIZE	TOTAL EMPLOYMENT
1	1-3
2	4-9
3	10-19
4	20-49
5	50-99
6	100-249
7	250-499
8	500-999
9	1000 and over

12/ Much of this section was excerpted directly from the Occupational Employment Statistics Survey Operations Manual.

13/ Much of this section was excerpted directly from the Occupational Employment Statistics Survey Operations Manual.

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Occupational Report 806.0

in Cooperation with the U.S. Department of Labor

The information collected on this form by the Bureau of Labor Statistics and the State agencies cooperating in its statistical programs will be held in confidence and will be used for statistical purposes only.

This report is authorized by law 29 U.S.C. 882. Your voluntary cooperation is needed to make the results of this survey comprehensive, accurate, and timely.

Form Approved
O.M.B. No. 44-R1615

OCCUPATIONAL EMPLOYMENT REPORT FOR THE HOSPITAL INDUSTRY

INDUSTRY DESCRIPTION: Is your unit's major service or product included in the description shown on the label at the right? If not, please describe your major product or service.

_____

ESTABLISHMENTS HAVING AN ORGANIZED MEDICAL STAFF, INPATIENT BEDS, & EQUIPMENT & FACILITIES TO PROVIDE COMPLETE HEALTH CARE SUCH AS PROVIDING DIAGNOSTIC SERVICES, EXTENSIVE MEDICAL TREATMENT INCLUDING SURGICAL, CONTINUOUS NURSING, & OTHER HOSPITAL SERVICES

REPORTING UNIT: Complete this report for your company operation (reporting unit) identified on the mailing label below. The report is requested only for the unit(s) at the physical location printed in the lower *left* portion of the label. To help you identify the specific unit(s) requested, our estimate of its total employment is in the lower right corner of the label. (Multi-unit employers may receive more than one questionnaire.)

REPORTING PERIOD: Report employment for a payroll period that includes April 12, 1980. If, because of *unusual* operational problems (other than normal seasonal variations in employment), such as work stoppages, temporary shutdowns, etc., this period is not typical, please report for the pay period in which operations most closely approximate the normal for the month shown and indicate the period selected: _____.

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PART I PLEASE COMPLETE THESE FIVE ITEMS:

A. STATUS OF ACTIVITY If the Reporting Unit did not operate under your management during the reporting period, please check the appropriate block below:

(1) ☐ This unit has been sold or merged. New name and address is: _____

_____

(2) ☐ This unit is out of business. (3) ☐ Other *(describe)* _____

B. TYPE OF OWNERSHIP *(Please check one of the following)*

(1) ☐ Corporation (2) ☐ Partnership (3) ☐ Sole Proprietorship

(4) ☐ Other *(explain)* _____

(Please change if incorrect)

(Employment)

Office Use Only
Status
Auxiliary

C. AUXILIARY UNIT STATUS If the Reporting Unit is *primarily* engaged in performing services for *other* units of your company, please check the one block below that best describes the service performed:

(1) ☐ Central administrative office (2) ☐ Research, development, or testing (3) ☐ Storage *(warehouse)* (4) ☐ Other *(specify, e.g., powerplant)* _____

D. UNIT TOTAL EMPLOYMENT *(Include full and part-time employees)* _____ Office Code 999999

Enter the total employment, as defined in the instructions on the following page, of the reporting unit shown on the address label. This figure should equal the employment total on the last page of this report.

If the "Unit Total Employment" shown in the box represents more than one reporting unit, please indicate how many reporting units are included _____.

E. If questions arise concerning your report, whom should we contact?

Name | Title | City & State | Area Code | Telephone | Date

BLS ETA 2877 806.0 (Rev. January 1980)

REPORTING INSTRUCTIONS

Please review the following instructions and occupational list. If you have any questions regarding the reporting unit requested or if the occupational list seems totally incompatible with your work force, please telephone the number indicated in the attached letter.

1. **Enter Unit Total Employment on page one** (Part I, Item D) and employment by occupation on the following pages. Unit Total Employment and the sum of the employees reported should be the same.

UNIT TOTAL EMPLOYMENT:

Includes: Full or part-time paid workers; Workers on *paid* vacations or other types of leave; Workers on *unpaid* short-term absences (i.e., illness, bad weather, temporary layoff, jury duty); Salaried officers, executives and staff of incorporated firms; Employees temporarily assigned to other units; Employees for whom this unit is their permanent (home) duty station, regardless of whether this unit prepares their paycheck.

Excludes: Proprietors, owners and partners of unincorporated firms; Unpaid family workers; Workers on extended leave (i.e., pensioners and members of the armed forces).

2. **Report** all employees in one or another of the listed occupations in Part II. Use the "All Other" categories only when there is no appropriate occupation described. If accurate employment figures are not available, reasonable estimates may be given.

Report multiple job holders only once: Report an employee who performs work in two or more of the listed occupations in the job that you believe requires the ***highest level of skill.*** If there is no measureable difference in skill requirements, report the employee in the occupation in which he spends most of his time.

Report employees in the occupation in which they are working, not in an occupation for which they may have been trained, if that is different. For example, an employee trained as an Engineer but working as a Drafter, should be reported as a Drafter.

Report working supervisors (those spending 20% or more of their time at work similar to that performed by workers under their supervision) in the occupations which are most closely related to their work duties.

Report part-time workers, learners, and apprentices in the occupation in which they ordinarily perform their work.

Report skilled trade helpers in the occupation "Helper, Trades." Report operative helpers, not separately listed, in the "All Other Operatives and Semiskilled Workers" category.

Report Apprentice and Research and Development workers in the shaded spaces provided. Please note that the number of Apprentices or R&D workers should be *included* along with the number of nonapprenticed or non-R&D workers in the unshaded area. Report R&D workers whether or not R&D is the primary function of your unit. See definitions for Apprentice and R&D workers below.

3. **Add all employment in unshaded areas** and record the overall total of all employees at the end of the report. This figure should equal Unit Total Employment on page 1 (Part I, Item D).

4. **Supplemental Sheet.** Complete this page if you have reported workers in any "All Other" category who are in occupations that are either numerically important in your operation or that require substantial training. This page will be used to modify occupational lists in subsequent surveys.

DEFINITIONS:

Apprentices: Workers who learn, according to a written or oral contractual agreement, a recognized skilled craft or trade requiring more than two (2) years of on-the-job training through job experience supplemented by related instructions, prior to the time that they may be considered qualified workers.

- **DO NOT COUNT** helpers and learners as apprentices.

Research and Development: Include in this function employees who spend the greatest proportion of their time performing, managing, or administering basic and applied research in engineering, mathematics, physical, life (including medicine), and other sciences; and in the design and development of prototypes and processes. For purposes of this study, research and development *includes* the following types of activities: (a) Pursuit of planned research of new knowledge, whether or not the research has reference to a specific application. (b) Application of existing knowledge to problems involved in the creation of a new product or process, including work required to evaluate possible uses. (c) Application of existing knowledge to problems involved in the improvement of an existing product or process.

EMPLOYMENT BY OCCUPATION

Occupations PART II — Please report number of your employees by occupation.	Number of Employees	Office Code
MANAGERS AND OFFICERS		
MANAGERS AND OFFICERS (*INCLUDE* CORPORATE OFFICERS; PLANT MANAGER; DISTRICT MANAGER; OFFICE MANAGER; SALES MANAGER; ADMINISTRATOR, HOSPITAL; COORDINATOR OF REHABILITATION SERVICES; SUPERVISOR, PUBLIC-HEALTH NURSING; SUPERINTENDENT, HOSPITAL; ETC.; *EXCLUDE* OWNERS AND PARTNERS OF UNINCORPORATED FIRMS): Include persons concerned with policy making, planning, organizing, staffing, directing, and/or who directly supervise the activities of the company or establishment work force and/or professional or technical management-support personnel. Also include persons responsible for the operation of an enterprise or establishment (usually small-scale) in which they may engage, in part, in the same activities as the workers they supervise, but who also directly organize, control, and coordinate activities, do the planning, and who may be responsible for such matters as financing. (Include *only* Managers and Officers who are exempt from the minimum wage and overtime provisions of the Fair Labor Standards Act.)	R&D + Non R&D =	100003
	R&D Only	100005
PROFESSIONAL AND TECHNICAL OCCUPATIONS ***Professional Occupations*: Include persons concerned with the theoretical or practical aspects of such fields as science, engineering, technical work, art, education, medicine, law and business relations. Most of these occupations require substantial educational preparation, usually at the university level. Typical examples are: Architect; Engineer (including Sales Engineer); Chemist; Metallurgist; Physicist; Mathematician; Statistician; Biologist; Economist; Accountants and Auditors; Purchasing Agent; Public Relations Specialist; Personnel and Training Specialist (other than Departmental Manager); Lawyer; Physicians and Surgeons; Registered Nurse; Editors and Writers. *Technical Occupations:* Include all persons actually engaged in technical work utilizing theoretical knowledge of fundamental scientific, engineering, mathematical, computer programming or draft design principles, comparable to those acquired through study at technical institutes, junior colleges or acquired through other formal post high school training less extensive than a 4-year college course, or through equivalent on-the-job training or experience. *Note: Quality Control Professional and Technical Workers* should be reported according to the nature of the quality control process (i.e. chemical, mechanical, biological). Thus, an Engineer engaged in quality control work of a chemical nature should be reported as a Chemical Engineer.		
PHYSICIAN AND/OR SURGEON (HEART SPECIALIST; GENERAL PRACTITIONER; FAMILY PHYSICIAN; FLIGHT SURGEON; LARYNGOLOGIST; OTOLOGIST; PHYSIATRIST; DOCTOR OF NUCLEAR MEDICINE; RADIOLOGIST; ALLERGIST; PSYCHIATRIST; OSTEOPATH; ETC.): A doctor of medicine who diagnoses and treats mental or physical disorders. May specialize in surgery, obstetrics, psychiatry, etc.	R&D + Non R&D =	254693
	R&D Only	254695
DENTIST (ORAL PATHOLOGIST; DENTAL SURGEON; ENDODONTIST; ORAL SURGEON; ORTHODONTIST; PEDODONTIST; PROSTHODONTIST; PERIODONTIST; PUBLIC-HEALTH DENTIST; ETC.): Diagnoses and treats diseases, injuries, and malformations of teeth or gums, and related oral structures.	R&D + Non R&D =	254333
	R&D Only	254335
CHIROPRACTOR (DOCTOR, CHIROPRACTIC; CHIROPRACTIC; ETC.): Adjusts spinal column and other articulations of the body to prevent disease and correct abnormalities of the human body believed to be caused by interference with the nervous system.	R&D + Non R&D =	254193
	R&D Only	254195

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EMPLOYMENT BY OCCUPATION

Occupations	Number of Employees	Office Code
OPTOMETRIST (*EXCLUDE* OPTICIAN AND OPHTHALMOLOGIST): Examines eyes to determine visual efficiency and performance by use of instruments and observation, and prescribes corrective procedures.	R&D + Non R&D = R&D Only	254593 254595
PODIATRIST (PODIATRIC SURGEON; PODOPEDIATRICIAN; PODIATRIST, ORTHOPEDIC; FOOT SPECIALIST; CHIROPODIST; ETC.): Diagnoses and treats diseases and deformities of the human foot.	R&D + Non R&D = R&D Only	254703 254705
NURSE, PROFESSIONAL (NURSE, INSTRUCTOR; NURSE, COLLEGE; DIRECTOR, STUDENT HEALTH SERVICES; PUBLIC-HEALTH NURSE; NURSE, HEAD; NURSE, SUPERVISOR; NURSE PRACTITIONER; NURSE-MIDWIFE; NURSE ANESTHETIST; NURSE, GENERAL DUTY; NURSE, PRIVATE DUTY; ETC.; *EXCLUDE* PRACTICAL NURSE): Administers nursing care to ill or injured. *Include* administrative and instructing nurses, and public health, industrial, private duty and surgical nurses. Licensing or registration is required.		254573
PHARMACIST (DRUGGIST; PHARMACIST, HOSPITAL; REGISTERED PHARMACIST; ETC.): Compounds and dispenses medications following prescriptions issued by physician, dentist or other authorized medical practitioner.		254663
PHYSICIAN'S ASSISTANT (GYNECOLOGIST ASSISTANT; CHILD HEALTH ASSOCIATE; BIRTH ATTENDANT; ETC.; *EXCLUDE* AMBULANCE ATTENDANT): Provides patient services under direct supervision and responsibility of doctor of medicine or osteopathy. Elicits detailed patient histories and does complete physical examinations. Reaches tentative diagnosis and orders appropriate laboratory tests. Requires substantial educational preparation, usually at colleges or junior colleges. Most physician's assistants complete 2 years of formal training, but training may vary from 1 to 5 years depending on the nature of the training and previous education and experience. *Exclude* Ambulance Attendants whose training is limited to the application of first aid.		340163
DIETITIAN AND/OR NUTRITIONIST (RESEARCH NUTRITIONIST; DIRECTOR, DIETETICS DEPARTMENT; DIETITIAN, ADMINISTRATIVE; NUTRITIONIST, PUBLIC HEALTH; DIETITIAN, THERAPEUTIC; DIETITIAN, TEACHING; DIETITIAN, CLINICAL; INSTITUTIONAL-NUTRITION CONSULTANT; ETC.): Organizes, plans, and conducts food service or nutritional program to assist in promotion of health and control of disease. May administer activities of department providing quantity food service. May plan, organize, and conduct programs in nutritional research.	R&D + Non R&D = R&D Only	254343 254345
DIETETIC TECHNICIAN (DIETETIC INTERN; ETC.): Provides service in assigned areas of food service management. Teaches principles of food and nutrition and provides dietary counseling under direction of Dietitian.		350143
THERAPIST: Include persons trained in methods of treatment and rehabilitation who use exercise, massage, heat, light, and water as well as mechanical and electrical devices to treat a variety of disorders. Include therapists engaged in work at a level which requires knowledge of therapy comparable to knowledge acquired through college, junior college, technical institute, or other formal post-high school training.		
PHYSICAL THERAPIST (PHYSICAL THERAPIST, RESEARCH; PHYSICAL THERAPIST, PEDIATRIC; PHYSIOTHERAPIST; PHYSICAL THERAPIST, PULMONARY; ETC.): Applies techniques and treatments which help relieve pain, increase the patient's strength, and decrease or prevent deformity and crippling.	R&D + Non R&D = R&D Only	254683 254685
SPEECH PATHOLOGIST AND/OR AUDIOLOGIST (SPEECH THERAPIST; ETC.): Examines and provides remedial services for persons with speech and hearing disorders, and performs research related to speech and language problems.	R&D + Non R&D = R&D Only	255383 255385

EMPLOYMENT BY OCCUPATION

Occupations	Number of Employees	Office Code
CORRECTIVE THERAPIST: Applies techniques and treatment designed to prevent muscular deconditioning resulting from long convalescence or inactivity due to chronic illness.	R&D + Non R&D =	255413
	R&D Only	255415
MANUAL-ARTS, MUSIC, AND/OR RECREATIONAL THERAPIST (THERAPIST FOR BLIND; INSTRUCTOR OF BLIND; ETC.): Plans, organizes, and directs medically oriented manual arts, musical, or recreational programs in hospital or similar institution to rehabilitate patients who are physically or mentally ill.		255373
OCCUPATIONAL THERAPIST (DIRECTOR, OCCUPATIONAL THERAPY; INDUSTRIAL THERAPIST; TEACHER, EDUCATIONALLY HANDICAPPED; EDUCATIONAL THERAPIST; ETC.): Plans, organizes, and participates in medically oriented occupational program in hospital or similar institution to rehabilitate patients who are physically or mentally ill.	R&D + Non R&D =	254583
	R&D Only	254585
RESPIRATORY THERAPIST (INHALATION THERAPIST; ETC.): Sets up and operates various types of equipment such as iron lungs, oxygen tents, resuscitators, and incubators to administer oxygen and other gases to patients.	R&D + Non R&D =	255423
	R&D Only	255425
ALL OTHER THERAPISTS: Include all other therapists and related occupations *not* classified above.	R&D + Non R&D =	255223
	R&D Only	255225
MEDICAL AND DENTAL TECHNICIANS AND TECHNOLOGISTS: Includes those concerned with the application of technical knowledge in fields of medicine or dentistry for examination and treatment of patients or for research. Usually these technicians and technologists work under the direct supervision of a physician or dentist and assist him in those functions described as routine at the professional level.		
LICENSED PRACTICAL NURSE (NURSE, PRACTICAL; ETC.; *EXCLUDE* PROFESSIONAL NURSE): Cares for ill, injured, convalescent, and handicapped persons in hospitals, clinics, private homes, sanitariums and similar institutions.		340133
DENTAL HYGIENIST (ORAL HYGIENIST; DENTAL HYGIENIST, COMMUNITY HEALTH; ETC.): Performs dental prophylactic treatments and instructs groups and individuals in care of the teeth and mouth.		350013
MEDICAL-RECORD LIBRARIAN (HOSPITAL-RECORD ADMINISTRATOR; MEDICAL-RECORD ADMINISTRATOR; ETC.): Compiles and maintains medical records of hospital and clinic patients.		340483
RADIOLOGIC TECHNOLOGIST AND/OR NUCLEAR MEDICAL TECHNOLOGIST (NUCLEAR MEDICAL TECHNOLOGIST; RADIOISOTOPE TECHNOLOGIST; ETC.): Applies roentgen rays and radioactive substances to patients for diagnostic purposes. Positions patients under x-ray machine. Administers drugs or chemical mixtures orally or as enemas to render organs opaque. Assists in treating diseased or affected areas of body, under supervision of physician, by exposing area to specified concentrations of x-rays for prescribed periods of time. Prepares, administers, and measures radioactive isotopes in therapeutic, diagnostic and tracer studies.	R&D + Non R&D =	350183
	R&D Only	350185
RADIOLOGIC TECHNICIAN (X-RAY TECHNOLOGIST; RADIOLOGIC TECHNOLOGIST; ETC.): Maintains and safely uses equipment and supplies necessary to demonstrate portions of the human body on x-ray film or fluoroscopic screen for diagnostic purposes.	R&D + Non R&D =	340363
	R&D Only	340365

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Occupations	Number of Employees	Office Code
BLOOD BANK TECHNOLOGY SPECIALIST (HEMATOLOGY TECHNOLOGIST; BLOOD-BANK TECHNOLOGIST; BLOOD-BANK TECHNICIAN; HEMATOLOGY TECHNICIAN; ETC.): Collects, classifies, processes and stores donor blood and blood components. Performs routine and specialized tests in blood bank.	R&D + Non R&D = R&D Only	350153 350155
MEDICAL LABORATORY TECHNOLOGIST (MEDICAL TECHNOLOGIST; SEROLOGY TECHNOLOGIST; ULTRASOUND TECHNOLOGIST; MEDICAL-LABORATORY ASSISTANT; ETC.): Performs complex or specialized bacteriological, biological, and chemical tests under the supervision of a pathologist, physician, or qualified scientist for use in the diagnosis and evaluation of treatment of disease.	R&D + Non R&D = R&D Only	350023 350025
MEDICAL LABORATORY TECHNICIAN (SEROLOGY TECHNICIAN; CYTOTECHNICIAN; TISSUE TECHNICIAN; ETC.): Performs routine tests in medical laboratory for use in treatment and diagnosis of diseases.	R&D + Non R&D = R&D Only	350103 350105
DENTAL-LABORATORY TECHNICIAN (DENTAL CERAMIST; DENTAL TECHNICIAN, CROWN AND BRIDGE; DENTURE-MODEL MAKER; ETC.): Constructs and repairs dental appliances, according to dentist's or orthodontist's prescription.	Journeymen + Apprentice = Apprentice Only	55C623 55C624
SURGICAL TECHNICIAN (OPERATING-ROOM TECHNICIAN; SURGICAL ORDERLY; ETC.): Performs any combination of the following tasks, before during or after operation: Prepares patient by washing, shaving, etc. Places equipment and supplies in operating room according to surgeon's instruction. Arranges instruments under direction of nurse. Maintains specified supply of fluid levels for use during operation. Adjusts lights and equipment as directed. Cleans operating room. Counts sponges, needles, instruments used during operation. May assist in administering blood, plasma, or other injections or transfusions. May hand surgeon instruments and supplies, hold retractors and cut sutures as directed.	R&D + Non R&D = R&D Only	340343 340345
BIOCHEMISTRY TECHNOLOGIST (CHEMISTRY TECHNOLOGIST; MEDICAL TECHNOLOGIST, CHEMISTRY; ETC.): Performs qualitative and quantitative chemical analyses of body fluids and exudates to provide information used in diagnosing and treating diseases.	R&D + Non R&D = R&D Only	350033 350035
MICROBIOLOGY TECHNOLOGIST (MEDICAL TECHNOLOGIST, BACTERIOLOGY; ETC.): Cultivates, isolates, and assists in identifying bacteria and other micro-organisms and performs various tests for evidence of disease or parasites.	R&D + Non R&D = R&D Only	350043 350045
CYTOTECHNOLOGIST: Stains, mounts, and studies cells of human body to determine pathological condition.	R&D + Non R&D = R&D Only	350053 350055
HISTOLOGIC TECHNOLOGIST (MEDICAL TECHNOLOGIST, HISTOLOGY; TISSUE TECHNOLOGIST; HISTOPATHOLOGY TECHNOLOGIST; ETC.): Cuts, stains, mounts and studies specimens of animal or human tissues to provide data on functioning of tissues and organs, and causes or progress of disease.	R&D + Non R&D = R&D Only	350063 350065

EMPLOYMENT BY OCCUPATION

Occupations	Number of Employees	Office Code
ELECTROCARDIOGRAPH TECHNICIAN (EKG TECHNICIAN; ETC.): Records electromotive variations in action of heart muscle, using electrocardiograph machine, to provide data for diagnoses of heart ailments.	R&D + Non R&D =	350113
	R&D Only	350115
ELECTROENCEPHALOGRAPH TECHNICIAN (EEG TECHNICIAN; ETC.): Measures impulse frequencies and differences in electrical potential between various portions of the brain, using equipment that records data as a series of irregular lines on a continuous graph to be used by medical practitioner in diagnosing brain disorders.	R&D + Non R&D =	350123
	R&D Only	350125
ORTHOPIST: Teaches persons with correctable focusing defects to develop and use binocular vision (focusing of both eyes).	R&D + Non R&D =	340213
	R&D Only	340215
PROSTHETIST-ORTHOTIST (ORTHOPEDIC-BOOT-AND-SHOE DESIGNER AND MAKER; ETC.): Writes specifications for and fits artificial limbs, braces and appliances for body deformities and disorders following prescription of physician or other qualified medical practitioner.	R&D + Non R&D =	350093
	R&D Only	350095
AUDIOMETRIST (AUDIOMETRIC TECHNICIAN; HEARING-TEST TECHNICIAN; ETC.): Administers pure-tone (air conduction) audiometric screening tests under supervision of audiologist or physician to individuals or groups.	R&D + Non R&D =	255393
	R&D Only	255395
ALL OTHER MEDICAL AND DENTAL TECHNOLOGISTS AND TECHNICIANS (BIOMEDICAL EQUIPMENT TECHNICIAN; BIOMEDICAL ELECTRONICS TECHNICIAN; BIOMEDICAL ENGINEERING TECHNICIAN; EMERGENCY MEDICAL TECHNICIAN; ETC.): Include all other medical and dental technologists and technicians *not* classified above. *Please identify on the supplement page at the end of this survey all significant occupations included in this category.*	R&D + Non R&D =	359003
	R&D Only	359005
DENTAL ASSISTANT: Assists dentist at chair, sets up patient and equipment; keeps records and performs related duties as required.		340033
NURSE AIDE AND/OR ORDERLY (NURSING ASSISTANT; ORDERLY; NURSE AIDE, SURGERY; NURSE AIDE, CENTRAL SUPPLY; CENTRAL-SUPPLY WORKER; ETC.): Assists in care of patients, under direction of nursing and medical staff. Bathes and transports patient, changes bedding, reads patient's temperature and pulse, cleans room and other facilities, and performs related duties as required.		440253
PSYCHIATRIC AID (ASYLUM ATTENDANT; ASSISTANT THERAPY AIDE; WARD ATTENDANT; WARD SUPERVISOR; CHARGE ATTENDANT; PSYCHIATRIC ATTENDANT; ETC.): Working under direction of nursing and medical staff, assists mentally ill patients.		440283
MEDICAL ASSISTANT (CHIROPRACTOR ASSISTANT; PODIATRIC ASSISTANT; MORGUE ATTENDANT; ETC.): Performs various duties under the direction of physician in examination and treatment of patients. Prepares treatment room, inventory of supplies, instruments, and patient for attention of physician. Hands instruments and materials to physician as directed.		440813
PHYSICAL THERAPY ASSISTANT (PHYSICAL THERAPIST ASSISTANT; PHYSICAL THERAPY AIDE, HYDROTHERAPY; PHYSICAL THERAPY AIDE, TRANSPORT; PHYSICAL THERAPY ATTENDANT; ETC.): Administers physical therapy treatment such as massages, heat, light and sound treatment and traction to relieve pain. Instructs, motivates and assists patients in learning and improving functional activities. Assists physical therapist.	R&D + Non R&D =	350163
	R&D Only	350165

EMPLOYMENT BY OCCUPATION

Occupations	Number of Employees	Office Code
OCCUPATIONAL THERAPY ASSISTANT (OCCUPATIONAL THERAPY AIDE; ETC.): Assists occupational therapist in administering medically oriented occupational program to assist in rehabilitating patients in hospitals and similar institutions.		440823
PHARMACY HELPER (PHARMACIST ASSISTANT; PHARMACY CLERK; ETC.): Mixes pharmaceutical preparations, under direction of pharmacist. Issues medicines, labels and stores supplies, and cleans equipment and work areas.		340473
ORTHOPEDIC-CAST SPECIALIST (ORTHOPEDIC ASSISTANT; ETC.): Molds and removes plaster of paris casts for patients, working under direction of attending physician.		440433
ARTIFICIAL-APPLIANCE MAKER (ARCH-SUPPORT TECHNICIAN; PROSTHETICS TECHNICIAN; RESTORATION TECHNICIAN; SHOEMAKER, CUSTOM; CUSTOM-SHOE DESIGNER AND MAKER; ETC.): Makes and repairs artificial limbs, braces and other orthopedic appliances according to prescription.	Journeymen + Apprentice = Apprentice Only	55S863 55S864
OPTICIAN, DISPENSING AND/OR OPTICAL MECHANIC (SPECTACLES ADJUSTER; OPTICIAN, CONTACT-LENS DISPENSING; PLASTIC-FRAME INSERTER; EYEGLASS-LENS GENERATOR; MULTIFOCAL-BUTTON GENERATOR; ETC.): Performs one or more of the following duties: Sets up and operates machines to grind and polish eyeglass lenses to prescription specifications, and assembles lenses into frames; fabricates lenses to prescription specifications, assists customer in selection of frames and fits frame to customer; fits contact lenses to prescription specifications.	Journeymen + Apprentice = Apprentice Only	55D693 55D694
RADIATION MONITOR (HEALTH-PHYSICS TECHNICIAN; ETC.): Monitors personnel, facilities, and work environment to detect radioactive contamination, using radiation detectors and other instruments.	R&D + Non R&D = R&D Only	340263 340265
CASEWORKER (HUMAN RELATIONS OR DRUG AND ALCOHOL COUNSELOR; SOCIAL WORKER, MENTAL; FAMILY COUNSELOR; SOCIAL WORKER, HEALTH SERVICES; SOCIAL WORKER, PSYCHIATRIC; ETC.): Counsels and aids individuals and families requiring social service assistance.		254183
CHILD-CARE WORKER (NURSERY SCHOOL ATTENDANT; DAY CARE WORKER; CHILD-DAY-CARE CENTER WORKER; ATTENDANT, CHILDREN'S INSTITUTION; CHILD-CARE ATTENDANT; HOUSE PARENT; ETC.): Serves and assists children in their daily activities and needs in institutions, special schools, day-care centers or nursery schools. May be under direction of professional staff.		440773
SOCIAL SERVICE AIDE: Provides various specified duties to help clients obtain and use social and related services under supervision of professional staff or as part of a team.		440803
AMBULANCE DRIVER AND/OR ATTENDANT (AMBULANCE ATTENDANT; ETC.): Drives ambulance or assists ambulance driver in transporting sick, injured or convalescent persons. Assists in lifting patients and rendering first aid. May be required to have Red Cross first-aid training certificate.		55V063
DISPATCHER, POLICE, FIRE AND AMBULANCE: Receives complaints from public concerning crimes and police emergencies and broadcasts orders to police radio patrol units in vicinity to investigate. Operates radio and telephone equipment to receive reports of fires and medical emergencies and relays information or orders to proper officials.		620253

EMPLOYMENT BY OCCUPATION

Occupations	Number of Employees	Office Code
• *SELECTED NONSCIENTIFIC OCCUPATIONS*		
ACCOUNTANTS AND AUDITORS (PAYROLL AUDITOR; ACCOUNTANT, TAX; AUDITOR, INTERNAL; FINANCIAL-RECORDS EXAMINER; ACCOUNTING-SYSTEM EXPERT; ETC.): Examines, analyzes, and interprets accounting records for the purpose of giving advice or preparing statements and installing or advising on systems of recording costs or other financial and budgetary data. *Exclude* tax preparers who are not professional accountants.		254013
PURCHASING AGENT AND/OR BUYER (BUYER, ASSISTANT; LOGISTICS OFFICER; PROCUREMENT ENGINEER; EQUIPMENT ENGINEER; STOCK BUYER; MANAGER, SUPPLY; ETC.): Purchases machinery, equipment, tools, raw materials, parts, services, and supplies necessary for operation of an organization.		253003
PERSONNEL AND LABOR RELATIONS SPECIALISTS (DIRECTOR OF CAREER RESOURCES; COORDINATOR OF PLACEMENT; DIRECTOR OF CAREER PLANNING AND PLACEMENT; WAGE AND SALARY ADMINISTRATOR; CAREER COUNSELOR; MEDIATOR; EMPLOYEE RELATIONS ADMINISTRATOR; ETC.): *Personnel Specialist*: Conducts programs of recruitment, selection, training, promotion, welfare, safety, compensation, recreation and separation of employees. Include such occupations as Utilization Officer, Job Analyst, Position Classifier, etc. *Exclude* occupations in personnel research and in the administration of testing and counseling programs, for which a background in psychology is required. *Labor Relations Specialist*: Serves as specialist on labor management relations, representing either management or labor union. Studies and interprets collective bargaining agreements and current labor market conditions to assist in establishing policies and operating procedures. Reviews contract administration to insure that management and labor organizations adhere to contract specifications.		254653
LAWYER (COUNSELOR-AT LAW; INSURANCE ATTORNEY; CLAIM ATTORNEY; BUSINESS AND FINANCIAL COUNSEL; ETC.): Conducts criminal and civil lawsuits, draws up legal documents, advises clients as to legal rights, and practices other phases of law. May represent client in court, or before quasi-judicial or administrative agencies of government. May specialize in a single area of law such as patent law; corporate law; etc.		254463
CLERGY (MINISTER; PRIEST; RABBI; ETC.): Conducts religious worship and performs other spiritual functions associated with beliefs and practices of religious faith or denomination as delegated by ordinance, license, or other authorization, and provides spiritual and moral guidance and assistance to members.		254233
LIBRARIAN, PROFESSIONAL (HOSPITAL RECORD ADMINISTRATOR; MEDICAL RECORD ADMINISTRATOR; MEDICAL RECORD TECHNICIAN; CHIEF LIBRARIAN, WORK WITH BLIND; CHIEF LIBRARIAN, MUSIC DEPARTMENT; HOSPITAL LIBRARIAN; ETC.): Include persons concerned with administering libraries and performing related library services including selecting, acquiring, cataloging, classifying, circulating, and maintaining library materials; furnishing references, bibliographies, and reader's advisory services. May select music, films, or other audio-visual material for subject matter of program.		254483
MEDICAL SCIENTIST (PATHOLOGIST; FORENSIC PATHOLOGIST; MEDICAL PATHOLOGIST; SURGICAL PATHOLOGIST; CLINICAL PATHOLOGIST; NEUROPATHOLOGIST; ETC.): Include Medical Scientists such as Physicians, Dentists, Public Health Specialists and Pharmacists who are concerned with the understanding of human diseases and improvement of human health, and are engaged in clinical investigation or other research, production, technical writing, or related activities. *Exclude* practitioners who provide medical care or dispense drugs.	R&D + Non R&D = R&D Only	223053 223055
• *SELECTED SCIENTIFIC OCCUPATIONS*		
SYSTEMS ANALYST, ELECTRONIC DATA PROCESSING (PROGRAMMER-ANALYST; COMPUTATIONAL ENGINEER; APPLIED MATHEMATICIAN; SYSTEMS ANALYST, ENGINEERING-SCIENTIFIC; COMPUTING ANALYST; ENGINEERING ANALYST; ETC.): Analyzes business, scientific, and technical problems for application to electronic data processing systems. *Exclude* persons working as Engineers, Mathematicians, or Scientists.	R&D + Non R&D = R&D Only	240003 240005

EMPLOYMENT BY OCCUPATION

Occupations	Number of Employees	Office Code
COMPUTER PROGRAMMER (PROGRAMMER, BUSINESS; PROGRAMMER, ENGINEERING AND SCIENTIFIC; ETC.): Converts symbolic statement of business, scientific, and technical problems to detailed logical flowcharts. *Exclude* persons working as Engineers, Scientists, Mathematicians, or Systems Analysts.	R&D + Non R&D =	310003
	R&D Only	310005
ENGINEERS (*INCLUDE* SALES ENGINEER AND DESIGN ENGINEER; ETC.): Include persons concerned with practical application of physicial laws and principles of engineering for the development and utilization of machines, materials, instruments, processes, and services. Count as Engineers all persons actually engaged in chemical, civil, electrical, mechanical, metallurgical, or any other type of engineering work at a level which requires knowledge of engineering equivalent at least to that acquired through completion of a 4-year college course with a major in one of these fields, regardless of whether they hold a college degree. *Include* all Engineers in research and development, production, technical services, sales, and other positions which require them to use the indicated level of knowledge in their work. *Exclude* persons trained in engineering, but currently employed in positions not requiring the use of such training. *Include* Architectural Engineer; *exclude* Architect.		
CHEMICAL ENGINEER (CHEMICAL-TEST ENGINEER; CHEMICAL RESEARCH ENGINEER; ETC.): Designs chemical plant equipment and devises processes for manufacturing chemicals and products such as gasoline, synthetic rubber, plastics, detergents, cement, and paper and pulp, applying principles and technology of chemistry, physics, and engineering.	R&D + Non R&D =	210033
	R&D Only	210035
MECHANICAL ENGINEER (MECHANICAL-DESIGN ENGINEER, FACILITIES; GENERAL-AND-SPECIAL TOOLS INVESTIGATOR AND PLANNER; UTILIZATION ENGINEER; MECHANICAL RESEARCH ENGINEER; OPTOMECHANICAL TECHNICIAN; ETC.): Performs a variety of engineering work in planning and design of tools, engines, machines, and other mechanically functioning equipment; and oversees installation, operation, maintenance, and repair of such equipment, including centralized heat, gas, water, and steam systems.	R&D + Non R&D =	210083
	R&D Only	210085
ELECTRICAL AND ELECTRONIC ENGINEERS (ELECTRICAL-RESEARCH ENGINEER; ELECTRONICS ENGINEER; ELECTRONICS-RESEARCH ENGINEER; ILLUMINATING ENGINEER; BUILDING-ILLUMINATING ENGINEER; CENTRAL-OFFICE EQUIPMENT ENGINEER; SERVICES ENGINEER; ETC.): *Electrical Engineer*: Performs a variety of engineering work in designing, planning, and overseeing manufacture, construction, installation, operation, and maintenance of electric or electronic components, equipment, systems, facilities, and machinery used in generation, transmission, distribution, and utilization of electrical energy for domestic, commercial, or industrial consumption. *Electronic Engineer*: Conducts research and development concerned with design and manufacture of vacuum and gaseous tubes, semiconductor and other solid-state devices, and electronic equipment, and their application to commercial, industrial, military, scientific, and medical equipment, processes, and problems.	R&D + Non R&D =	210053
	R&D Only	210055
INDUSTRIAL ENGINEER (FIRE-PROTECTION ENGINEER; INDUSTRIAL HYGIENE ENGINEER; INDUSTRIAL-HEALTH ENGINEER; EFFICIENCY EXPERT; ETC.): Performs a variety of engineering work in planning and overseeing utilization of production facilities and personnel in department or other subdivision of industrial establishment. Plans equipment layout, workflow, and accident prevention measures to maintain efficient and safe utilization of plant facilities. Plans and oversees work study and training programs to promote efficient manpower utilization. Develops and oversees quality control, inventory control, and production record systems.	R&D + Non R&D =	210063
	R&D Only	210065
CIVIL ENGINEER (PUBLIC-HEALTH ENGINEER; SANITARY ENGINEER; STRUCTURAL ENGINEER; IRRIGATION ENGINEER; ETC.): Performs a variety of engineering work in planning, designing, and overseeing construction and maintenance of structures and facilities, such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation projects, pipelines, power plants, water and sewage systems, and waste disposal units.	R&D + Non R&D =	210043
	R&D Only	210045

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EMPLOYMENT BY OCCUPATION

Occupations	Number of Employees	Office Code
ALL OTHER ENGINEERS (NUCLEAR ENGINEER; ETC.): Include all other engineers *not* classified above. *Please identify on the supplement page at the end of this survey all significant occupations included in this category.*	R&D + Non R&D =	219003
	R&D Only	219005
ENGINEERING TECHNICIANS: Include technicians concerned with the practical application of physical laws and principles of engineering for the development and utilization of machines, materials, instruments, structures, processes, and services.		
DRAFTER (DRAFTER, ELECTRICAL; DRAFTER, ELECTRONIC; ETC.): Prepares clear, complete, and accurate working plans and detail drawings from rough or detailed sketches or notes for engineering or manufacturing purposes, according to specified dimensions. Utilizes knowledge of various machines, engineering practices, mathematics, building materials, and other physical sciences to complete drawings.	R&D + Non R&D =	320033
	R&D Only	320035
ELECTRICAL AND ELECTRONIC TECHNICIANS (ELECTRICAL-LABORATORY TECHNICIAN; COMPUTER-LABORATORY TECHNICIAN; CALIBRATION LABORATORY TECHNICIAN; STANDARDS LABORATORY TECHNICIAN; ETC.): Count in this group technicians with a background in electrical or electronic theory, physical science, and mathematics which enables them to perform jobs above the routine operating or maintenance levels. Normally, such employees are engaged in constructing, repairing, testing, installing, modifying, operating, or even designing a variety of production or experimental types of complex electrical or electronic equipment.	R&D + Non R&D =	320043
	R&D Only	320045
ALL OTHER ENGINEERING TECHNICIANS (LIGHT TECHNICIAN; SPECTROGRAPHIC ANALYST; ETC.): Assist engineers in both laboratory and production types of activities. Normally, these technicians work under the direct supervision of an engineer and assist in those functions usually described as 'routine' at the professional level. *Please identify on the supplement page at the end of this survey all significant occupations included in this category.*	R&D + Non R&D =	329003
	R&D Only	329005
MATHEMATICAL SCIENTISTS: Include persons concerned with research involving the physical universe and the application of established mathematical laws and principles to specific problems and situations. Count as Mathematicians only those persons whose positions require a knowledge of mathematical science equivalent at least to that acquired through completion of a 4-year college course with a major in mathematics, statistics, or actuarial science and who spend the greatest proportion of their time in development or application of mathematical and statistical techniques, regardless of whether they hold a college degree.		
MATHEMATICIAN (MATHEMATICIAN, RESEARCH; MATHEMATICIAN, APPLIED; ETC.): Conducts research in fundamental mathematics and/or the application of mathematical techniques to science, management and other fields, and solves or directs solutions to problems in various fields by mathematical methods.	R&D + Non R&D =	221033
	R&D Only	221035
STATISTICIAN (DEMOGRAPHER; STATISTICIAN, APPLIED; STATISTICIAN, ENGINEERING AND PHYSICAL SCIENCE; STATISTICIAN, ANALYTICAL; ETC.): Plans surveys, and collects, organizes, interprets, summarizes, and analyzes numerical data, applying statistical theory and methods to provide usable information in scientific, business, economic, and other fields. The data derived from surveys may represent either complete enumeration or statistical samples. *Exclude* Mathematical Statisticians who are engaged solely in the development of mathematical theory associated with the application of statistical techniques; these persons would be classified as Mathematicians.	R&D + Non R&D =	221043
	R&D Only	221045

EMPLOYMENT BY OCCUPATION

Occupations	Number of Employees	Office Code
ALL OTHER MATHEMATICAL SCIENTISTS (COMPUTER-APPLICATIONS ENGINEER; ACTUARY; INVESTMENT ANALYST; ETC.): Include all other mathematical scientists *not* classified above. *Please identify on the supplement page at the end of this survey all significant occupations included in this category.*	R&D + Non R&D =	221993
	R&D Only	221995
SOCIAL SCIENTIST: Include persons concerned with human society and its characteristic elements, such as origin, race, or state; with economic and social relations and institutions involved in man's existence as a member of an organized community; and with the collection, interpretation, and application of scientific data relating to human behavior and mental processes.		
SOCIOLOGIST (RESEARCH WORKER, SOCIAL WELFARE; MEDICAL SOCIOLOGIST; SOCIAL PROBLEMS SPECIALIST; RURAL SOCIOLOGIST; CRIMINOLOGIST; URBAN SOCIOLOGIST; SOCIAL ECOLOGIST; ETC.; *EXCLUDE* CASEWORKER): Conducts research into origin and development of groups of human beings and patterns of culture and social organization which have arisen out of group life in society.		230053
PSYCHOLOGIST (HUMAN FACTORS SPECIALIST; PSYCHOMETRIST; MARKET-RESEARCH ANALYST; CHILD PSYCHOLOGIST; PSYCHOLOGIST, EDUCATIONAL; PSYCHOLOGIST, CLINICAL; PSYCHOLOGIST, SCHOOL; PSYCHOLOGIST, COUNSELING; PSYCHOLOGIST, PHYSIOLOGICAL; PSYCHOLOGIST, DEVELOPMENTAL; ETC.): Collects, interprets and applies scientific data relating to human behavior and mental processes. Activities are in either applied fields of psychology or in basic science fields and research. *Include* occupations in personnel research and in administration of testing and counseling programs. *Exclude* Psychiatrists.	R&D + Non R&D =	230043
	R&D Only	230045
ALL OTHER SOCIAL SCIENTISTS (COUNSELOR, NURSES' ASSOCIATION; DIRECTOR, VOCATIONAL COUNSELING; COUNSELING-CENTER MANAGER; SUPERVISOR OF GUIDANCE AND TESTING; ETC.): Include all social scientists *not* classified above. *Please identify on the supplement page at the end of this survey all significant occupations included in this category.*		239003
LIFE SCIENTIST (*EXCLUDE* MEDICAL PRACTITIONERS): Include persons concerned with research to increase basic knowledge of living organisms, including human beings, and the practical application of biological theories. Count as Life Scientists all Medical Scientists; Agricultural Scientists; Biological Scientists; and other Life Scientists who are actually engaged in scientific work at a level which requires a knowledge of the life sciences equivalent to that acquired through completion of a 4-year college course with a major in one of the life science fields, regardless of whether they hold a college degree. *Include* all Life Scientists in research and development, production, technical services, sales, and other positions which require them to use the indicated level of knowledge in their work.		
BIOLOGICAL SCIENTIST (ANATOMIST; PUBLIC-HEALTH MICROBIOLOGIST; MEDICAL PARASITOLOGIST; BIOCHEMIST; MARINE BIOLOGIST; CHEMIST, STEROIDS; CHEMIST, PHARMACEUTICAL; CHEMIST, ENZYMES; ENTOMOLOGIST; GENETICIST; BACTERIOLOGIST; HISTOLOGIST; MEDICAL PHYSIOLOGIST; ETC.): Include scientists concerned with research into problems dealing with life processes. *Include* Pathologists, Microbiologists, Pharmacologists, Bacteriologists, Toxicologists, and Zoologists.	R&D + Non R&D =	223023
	R&D Only	223025
ALL OTHER LIFE SCIENTISTS (AGRONOMIST; DAIRY-NUTRITION SPECIALIST; ETC.): Include all other life scientists *not* classified above. *Please identify on the supplement page at the end of this survey all significant occupations included in this category.*	R&D + Non R&D =	223993
	R&D Only	223995

EMPLOYMENT BY OCCUPATION

Occupations	Number of Employees	Office Code
PHYSICAL SCIENTISTS: Include persons concerned with research pertaining to the physical universe and the application of scientific laws and principles to specific problems and situations. Count as Physical Scientists all Chemists; Physicists; Geologists; Geophysicists; and other Physical and Earth Scientists who are actually engaged in scientific work at a level which requires a knowledge of the physical sciences equivalent to that acquired through completion of a 4-year college course with a major in one of the physical science fields, regardless of whether they hold a college degree. *Include* all Physical Scientists in research and development, production, technical services, sales, and other positions which require them to use the indicated level of knowledge in their work.		
GEOLOGISTS AND GEOPHYSICISTS (CRYSTALLOGRAPHER; GEODESIST; OCEANOGRAPHER, GEOLOGICAL; HYDROLOGIST; MINERALOGIST; ETC.): *Geologist*: Studies composition, structure, and history of the earth's crust; examines rocks, minerals, and fossil remains to identify and determine the sequence of processes affecting the development of the earth; applies knowledge of chemistry, physics, biology, and mathematics to explain these phenomena and to help locate mineral and petroleum deposits and underground water resources; prepares geologic reports and maps, interprets research data, and recommends further study or action. *Geophysicist*: Studies physical aspects of the earth, including its atmosphere and hydrosphere; investigates and measures seismic, gravitational, electrical, thermal, and magnetic forces affecting the earth, utilizing principles of physics, mathematics, and chemistry.	R&D + Non R&D =	222023
	R&D Only	222025
CHEMIST (CHEMIST, INORGANIC; CHEMIST, FOOD; CHEMIST, PHYSICAL; CHEMIST, ORGANIC; CHEMIST, ANALYTICAL; CHEMIST, POLLUTION CONTROL; ETC.): Conducts chemical tests, qualitative and quantitative chemical analyses or chemical experiments in laboratories for quality or process control or to develop new products or new knowledge.	R&D + Non R&D =	222013
	R&D Only	222015
PHYSICIST (HEALTH PHYSICIST; MEDICAL PHYSICIST; PHYSICIST, CRYOGENICS; PHYSICIST, PLASMA; PHYSICIST, LIGHT AND OPTICS; ELECTRO-OPTICAL ENGINEER; ETC.): Conducts research into phases of physical phenomena; develops theories and laws on the basis of observation and experiments; devises methods to apply laws and theories of physics to industry, medicine, and other fields.	R&D + Non R&D =	222053
	R&D Only	222055
ALL OTHER PHYSICAL SCIENTISTS (WATER QUALITY ANALYST; SOILS ANALYST; ENVIRONMENTAL SCIENTIST; PROJECT MANAGER, ENVIRONMENTAL RESEARCH; ETC.): Include all other physical scientists *not* classified above. *Please identify on the supplement page at the end of this survey all significant occupations included in this category.*	R&D + Non R&D =	222993
	R&D Only	222995
SCIENCE TECHNICIANS (*EXCLUDE* MEDICAL AND DENTAL TECHNICIANS): Assist Physical and Life Scientists in both laboratory and production types of activities. Normally, these technicians work under the direct supervision of a scientist and assist in those functions usually described as routine at the professional level. *Exclude* Medical and Dental Technicians.		
BIOLOGICAL SCIENCE TECHNICIAN (LABORATORY TECHNICIAN, ARTIFICIAL BREEDING; BIOLOGY SPECIMEN TECHNICIAN; ARTIFICIAL-INSEMINATION TECHNICIAN; ETC.): Assist Biological Scientists in their work. Normally, these technicians work under the direct supervision of a scientist and assist him/her in those functions usually described as routine at the professional level. Include all life science technicians except Medical and Dental Technicians.	R&D + Non R&D =	330023
	R&D Only	330025
ALL OTHER SCIENCE TECHNICIANS (AIR TESTER; LASER TECHNICIAN; POLLUTION-CONTROL TECHNICIAN; PHOTO-OPTICS TECHNICIAN; ETC.): Include all other science technicians *not* classified above. *Please identify on the supplement page at the end of this survey all significant occupations included in this category.*	R&D + Non R&D =	339003
	R&D Only	339005

EMPLOYMENT BY OCCUPATION

Occupations	Number of Employees	Office Code
ALL OTHER PROFESSIONAL WORKERS (LABORATORY COORDINATOR; ADMINISTRATIVE ASSISTANT; SPECIAL AGENT, GROUP INSURANCE; ETC.): Include all other professional workers *not* classified above. *Please identify on the supplement page at the end of this survey all significant occupations included in this category.*	R&D + Non R&D = R&D Only	290003 290005
ALL OTHER TECHNICIANS (ASSISTANT TEACHER; LIBRARY TECHNICAL ASSISTANT; TEACHER AIDE; ARTIFICIAL-PLASTIC-EYE MAKER; ETC.): Include all other technicians *not* classified above. *Please identify on the supplement page at the end of this survey all significant occupations included in this category.*	R&D + Non R&D = R&D Only	390003 390005
SALES OCCUPATIONS		
SALES REPRESENTATIVE, SALES AGENT, AND/OR SALES ASSOCIATE (SALES REPRESENTATIVE, CORRESPONDENCE COURSES; SALES REPRESENTATIVE, EDUCATION COURSES; SALESPERSON, FLOWERS; SALES REPRESENTATIVE, PROSTHETIC AND ORTHOTIC APPLIANCES; ORTHOPEDIC-SHOE FITTER; SALESPERSON, HEARING AIDS; ETC.; *EXCLUDE* SALES ENGINEER): Include persons concerned wholly or primarily with selling when knowledge of the goods or services sold is required. *Exclude* Sales Engineer; Sales Route Driver; and Cashier.		710003
SALES CLERK (PHARMACY STOCK CLERK; ATTENDANT, SELF-SERVICE STORE; ETC.; *EXCLUDE* CASHIER): Sells any of a large variety of goods or services, usually inexpensive and *not requiring much more knowledge of them other than price.* May write sales slips and ring up sale. Note: Sales persons who have more than a cursory knowledge of the product should be reported under Sales Representative, Agent, and/or Associate.		720023
CLERICAL OCCUPATIONS **Include office and plant clerical personnel. *Office clerical work* involves preparing, transcribing, transferring, systematizing, and preserving communications and records; collating accounts and distributing information. Typical examples are: Secretaries; Stenographers; Typists; File Clerks; Office Machine Operators; Bookkeepers; Cashiers; Messengers; Telephone Operators; etc. *Plant clerical work* involves planning, coordinating, or expediting production and the flow of work; or the clerical aspects of receiving, storing, issuing, or shipping of materials, merchandise, supplies, or equipment.**	[redacted]	
CLERICAL SUPERVISOR, OFFICE OR PLANT (SUPERVISOR, STENO POOL; SUPERVISOR, WORD PROCESSING; SUPERVISOR, FOOD CHECKERS AND CASHIERS; SUPERVISOR, COMPUTER OPERATIONS; SUPERVISOR, BLOOD-DONOR RECRUITERS; ETC.; *EXCLUDE* OFFICE MANAGER): Supervises and coordinates activities of workers engaged chiefly in one type of clerical function such as typing, filing, bookkeeping, tabulating data, etc. May assume responsibility for completion of work assignments by clerical force being supervised and for the accuracy of completed assignments. This classification does *not* include Working Supervisors (those spending 20 percent or more of their time at tasks similar to those of employees under their supervision).		613963

EMPLOYMENT BY OCCUPATION

Occupations	Number of Employees	Office Code
• *OFFICE CLERICAL OCCUPATIONS*		
CASHIER (*INCLUDE* CASHIER-CHECKER; CASH CLERK; HOSPITAL CASHIER; STORE CASHIER; FOOD TABULATOR, CAFETERIA; ETC.): Receives and disburses money in establishments other than banks. Usually involves use of adding machines, cash registers, and change makers.		613143
INSURANCE CLERK, MEDICAL (PATIENT-INSURANCE CLERK; HOSPITAL-INSURANCE CLERK; ETC.): Verifies hospitalization insurance coverage and computes benefits for patients in hospitals, clinics, and other medical facilities.		613483
SWITCHBOARD OPERATOR (PRIVATE-BRANCH-EXCHANGE OPERATOR; TELEPHONE OPERATOR; PBX OPERATOR; CONTROL-BOARD OPERATOR; TELEPHONE-ANSWERING-SERVICE OPERATOR; INTERCEPTOR OPERATOR; ETC.): Operates cord or cordless switchboard to relay incoming, outgoing, and interoffice calls. May supply information to callers and record messages.		613763
RECEPTIONIST (RECEPTION CLERK; APPOINTMENT CLERK; OUTPATIENT RECEPTIONIST; RECEPTIONIST, DOCTOR'S OFFICE; ETC.): Receives visitors coming into the establishment. Determines visitor's purpose and directs them to the proper person or department. May perform additional clerical duties such as typing.		613613
SWITCHBOARD OPERATOR-RECEPTIONIST: In addition to performing duties of switchboard operator, acts as receptionist and may also type or perform routine clerical work as part of regular duties. The typing or clerical work may take part of this worker's time while at switchboard.		613773
SECRETARY (MEDICAL SECRETARY; MEMBERSHIP SECRETARY; SCHOOL SECRETARY; SECRETARIAL STENOGRAPHER; ETC.): Schedules appointments; gives information to caller; takes and transcribes dictation; and otherwise relieves officials of clerical work and minor administrative and business detail.		613683
STENOGRAPHER (CLERK-STENOGRAPHER; FOREIGN-LANGUAGE STENOGRAPHER; MEDICAL STENOGRAPHER; STENO-TYPIST; STENOTYPE OPERATOR; ETC.): Takes dictation of correspondence, reports, and other matters, and transcribes dictated material. Performs a variety of clerical duties, except when working in stenographic pool. May transcribe material from sound recordings.		612003
LIBRARY ASSISTANT (TAPE LIBRARIAN; LIBRARY CLERK, TALKING BOOKS; BRAILLE-AND-TALKING BOOKS CLERK; REGISTRATION CLERK; CIRCULATION CLERK; DESK ATTENDANT; STACK CLERK; ETC.; *EXCLUDE* TECHNICAL ASSISTANT, LIBRARY): Compiles records, sorts and shelves books, and issues and receives library materials, such as books, films, and phonograph records.		613393
TYPIST (*INCLUDE* CLERK-TYPIST; ETC.): Types letters, reports, stencils, forms, addresses, or other straight-copy material from rough draft or corrected copy. May perform other clerical duties as assigned.		613923
FILE CLERK (FILE CLERK, X-RAYS; FILE CLERK, MEDICAL RECORDS; ETC.): Files correspondence, cards, invoices, receipts, and other records in alphabetical or numerical order, or according to the filing system used. Locates and removes material from file when requested. May be required to classify and file new material.		613303
PAYROLL AND/OR TIMEKEEPING CLERK (SCHEDULER AND PLANNER; PAYROLL CLERK, DATA PROCESSING; ETC.): Computes wages and posts wage data to payroll records and/or keeps a daily record showing time of arrival and departure from work of employees. Computes earnings from timesheets and work tickets, using calculator. Operates posting machine to compute and subtract deductions. Enters net wages on earnings record card, check stub, and payroll sheet.		613513
PERSONNEL CLERK (PERSONNEL-RECORDS CLERK; ACCIDENT-REPORT CLERK; ETC.): Compiles and keeps personnel records. Records data for each employee such as address, weekly earnings, absences, amount of sales or production, supervisory reports on ability and on date of and reason for termination. Compiles and types reports from employment records. Files employment records. Searches employee files and furnishes information to authorized persons.		613523
PROCUREMENT CLERK (PURCHASING CLERK; PURCHASE-REQUEST EDITOR; BID CLERK; ETC.): Compiles information and records to draw up purchase orders for procurement of material.		613553

EMPLOYMENT BY OCCUPATION

Occupations	Number of Employees	Office Code
ORDER CLERK (CREDIT CLERK, BLOOD BANK; ORDER-CONTROL CLERK, BLOOD BANK; AUDIO-VISUAL-EQUIPMENT-RENTAL CLERK; ETC.): Processes orders for material or merchandise from customer or establishment employee. Informs customer of receipt of order, prices, shipping date, delays, or additional information needed on the order. May route orders to departments for filling and follow up on orders to insure prompt delivery. May be designated according to method of receiving orders, such as Mail-Order Clerk or Telephone-Order Clerk; or according to type of order handled, such as Back-Order Clerk.		613503
BOOKKEEPER, HAND (SAFE-DEPOSIT-BOX BOOKKEEPER; GENERAL BOOKKEEPER; SAVINGS BOOKKEEPER; MEDICAL-VOUCHER CLERK; EXAMINER-RATING CLERK; MEDICAL-FEE CLERK; ETC.): Keeps record of financial transactions of establishment or keeps one section or set of financial records.		613073
ACCOUNTING CLERK (ACCOUNT-INFORMATION CLERK; MEDICAL-RECORDS AUDITOR, ACCOUNT-ANALYSIS REVIEWER; C.O.D. CLERK; BILL-OF-LADING CLERK; ETC.): Performs a variety of routine calculating and posting duties to accomplish accounting. May perform typing.		613013
STATISTICAL CLERK (BUDGET CLERK; ACTUARIAL CLERK; MILEAGE CLERK; RECORD CLERK; MEDICAL-RECORD CLERK; ETC.): Compiles data and computes statistics for use in statistical studies. Computes statistical data according to formulas, using calculator.		613743
OFFICE MACHINE OPERATORS: Include all persons whose principal duty is operating an office machine, e.g., Bookkeeping-Machine Operator; Duplicating Machine Operator; Tabulating Machine Operator; Console (Computer) Operator; and Keypunch Operator.		
BOOKKEEPING AND/OR BILLING MACHINE OPERATOR (POSTING-MACHINE OPERATOR; RECORDING CLERK; FEE CLERK; DELINQUENT-NOTICE-MACHINE OPERATOR; DEPOSIT-REFUND CLERK; ETC.): Operates special billing machines, generally a combination typing and adding machine, to prepare statements, bills, and invoices, or operates bookkeeping machines to copy and post data, make computations, and/or compile records of transactions.		611033
COMPUTER OPERATOR (CONSOLE OPERATOR; SMALL-SCALE-COMPUTER OPERATOR; ETC.): Monitors and controls electronic computer to process business, scientific, engineering, and other data, according to operating instructions.		611053
KEYPUNCH OPERATOR (DATA TYPIST; PRINTING-PUNCH OPERATOR; CARD-PUNCH OPERATOR; VERIFIER OPERATOR; ETC.): Operates a keypunch machine to record or verify alphabetic and/or numeric data on cards, disk or tape.		611073
PERIPHERAL EDP EQUIPMENT OPERATOR (VERIFIER-SORTER OPERATOR; SORTING-MACHINE OPERATOR; ASSISTANT CONSOLE OPERATOR; CARD-TAPE-CONVERTER OPERATOR; COLLATOR OPERATOR, DATA PROCESSING; ETC.): Operates on-line or off-line peripheral machines, according to instructions, to transfer data from one form to another, print output, and read data into and out of an electronic computer.		611093
ALL OTHER OFFICE MACHINE OPERATORS (ADDING-MACHINE OPERATOR; DUPLICATING-MACHINE OPERATOR; BRAILLE-THERMOFORM OPERATOR; BRAILLE-DUPLICATING-MACHINE OPERATOR; COIN-MACHINE OPERATOR; CHECK WRITER; ETC.): This group includes all other office machine operators *not* classified above.		611993
GENERAL CLERK, OFFICE (ADJUSTMENT CLERK; DEATH-CLAIM CLERK; BENEFITS CLERK; ADMINISTRATIVE CLERK; ETC.): Workers should be classified as General Clerks *only* if their duties are too varied and diverse to be classified in any specific office clerical occupation. Clerical duties may be assigned in accordance with the office procedures of individual establishments, and may include a combination of bookkeeping, typing, stenography, office machine operation, etc.		613333
ALL OTHER OFFICE CLERICAL WORKERS (BRAILLE PROOFREADER; DIETARY CLERK; ETC.): Include all other office clerical workers *not* classified above.		619003

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EMPLOYMENT BY OCCUPATION

Occupations	Number of Employees	Office Code
• *PLANT CLERICAL OCCUPATIONS*		
PRODUCTION CLERK AND/OR COORDINATOR (DISPATCHER; GARMENT SORTER; SHIRT SORTER; ETC.): Work involves most of the following: Expedites flow of work within or between departments of an establishment according to work schedules; reviews number, type, and proposed completion date of units to be produced; confers with department supervisors to determine progress of work and completion dates; compiles reports on progress of work and machine, tool, and equipment failures to inform planning department of production delays. May expedite material and may keep inventory of material in department.		620033
STOCK CLERK, STOCKROOM, WAREHOUSE OR STORAGE YARD (COMPUTER-TAPE LIBRARIAN; PRESCRIPTION CLERK, LENS-AND-FRAMES; LINEN CHECKER; UNIFORM ATTENDANT; CUSTODIAN, BLOOD BANK; DISPENSARY ATTENDANT; CLOTHES-ROOM WORKER; ETC.): Receives, stores, and issues equipment, material, merchandise, supplies, tools, dies or foodstuffs and compiles stock records in stockroom, warehouse, or storage yard. Work involves a combination of the following: Checking incoming orders, classifying and inspecting when necessary; storing supplies; applying identification to articles; issuing supplies; taking periodic or perpetual inventory; making up necessary reports; requesting or ordering supplies when needed. *Exclude* Stockroom Laborers and Nonworking Supervisors of Stock Clerks and Laborers.		620083
SHIPPING PACKER (DISTRIBUTING CLERK; ETC.): Assembles, packs, addresses, stamps, loads, and ships merchandise or material. Specific duties may include the following: Counts and compares quantity and identification numbers of units against order; assembles wooden or cardboard containers or selects preassembled container; inserts items into containers; moves container to shipping dock. May be designated according to specialty, such as Freight Clerk; Reshipping Clerk.		620043
SHIPPING AND/OR RECEIVING CLERK (RESHIPPING CLERK; FREIGHT CLERK; RECEIVING CLERK; UNLOADING CHECKER; RECEIVING INSPECTOR; MAIL SORTER; REFRIGERATED-CARGO CLERK; ETC.): Receives incoming shipments of merchandise and/or prepares merchandise for shipment and keeps records pertaining thereto. May supervise other shipping room workers, such as Shipping Packers.		620053
ALL OTHER PLANT CLERICAL WORKERS (LAUNDRY CLERK; KITCHEN CLERK; STOREROOM FOOD-CHECKER; TOOTH CLERK; ETC.): Include all other *plant* clerical workers *not* classified above.		629003
PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING AND POWERPLANT OCCUPATIONS **Include all skilled, semiskilled, and unskilled workers performing machine and manual tasks involving production, maintenance, construction, repair, material handling, and powerplant operations. *Include* 'apprentices' in the occupation to which they are apprenticed.**		
SUPERVISOR, NONWORKING (GREENSKEEPER, HEAD; WASHERY BOSS; GENERAL-LABOR SUPERVISOR; ETC.; *EXCLUDE* WORK LEADERS AND SERVICE SUPERVISORS): Supervises and coordinates activities of workers engaged in production, maintenance, construction, repair, material handling, and powerplant occupations. Studies work schedules and estimates employee-hour requirements for completion of job assignment. This classification does *not* include Working Supervisors (those spending 20% or more of their time at tasks similar to those of employees under their supervision). Work Leaders should be reported in the occupations which are most closely related to their specific work duties.		55B293
INSPECTOR (PERISHABLE-FREIGHT INSPECTOR; MAINTENANCE INSPECTOR; BUILDING-EQUIPMENT INSPECTOR; ETC.): Inspects parts, products or materials before, during, or after processing. Performs such operations as examining parts, products or materials for flaws and defects; checking their dimensions and appearance to determine whether they meet the required standards and specifications. Do *not* include technicians actually engaged in technical work at a level which requires knowledge of engineering, mathematical, physical and life sciences comparable to knowledge acquired through technical institutes, junior colleges, or other formal post-high school training.		55B583

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EMPLOYMENT BY OCCUPATION

Occupations	Number of Employees	Office Code
CARPENTER (CARPENTRY REPAIRER; CARPENTER, MAINTENANCE; ETC.): Performs the carpentry duties necessary to make or repair wooden structures, structural members, and fixtures and equipment, using carpentry tools and woodworking machines.	Journeymen + Apprentice =	55A473
	Apprentice Only	55A474
ELECTRICIAN (ELECTRICIAN, POWERHOUSE; BATTERY MAINTAINER, LARGE EMERGENCY STORAGE; ELECTRICAL REPAIRER; LIGHTING-EQUIPMENT OPERATOR; ETC.): Installs, maintains, and repairs wiring, electrical equipment, and fixtures. Insures that work is in accordance with relevant codes and may read blueprints.	Journeymen + Apprentice =	55B123
	Apprentice Only	55B124
MACHINIST (MAINTENANCE MACHINIST; MACHINIST, GENERAL; ETC.): Sets up and operates machine tools and fits and assembles parts to make or repair metal parts, mechanisms, tools or machines of an establishment applying knowledge of mechanics, shop mathematics, metal properties, and layout machining procedures. Studies specifications, such as blueprint, sketch, or description of part to be replaced, and plans sequence of operations.	Journeymen + Apprentice =	55B843
	Apprentice Only	55B844
PAINTER, MAINTENANCE (PAINTER, INTERIOR FINISH; METAL SPRAYER, PROTECTIVE COATING; ETC.): Paints walls, equipment, buildings, bridges, tanks, and other structural surfaces, using brushes and spray guns. May mix colors, oils, etc. to obtain proper color or consistency.	Journeymen + Apprentice =	55C123
	Apprentice Only	55C124
WELDER AND/OR FLAMECUTTER: Joins, surfaces, or otherwise makes or repairs structures or parts, using gas or electric welding, soldering, or brazing equipment with or without filler material; fusing to join or shape lead products or parts, using a gas torch; cutting or perforating metal, using gas or electric cutting equipment. Include Welders and Flamecutters whose duties involve a broad range of skill levels.	Journeymen + Apprentice =	55D463
	Apprentice Only	55D464
PLUMBER AND/OR PIPEFITTER (PIPE FITTER, GAS PIPE; PIPE FITTER, FIRE-SPRINKLER SYSTEMS; SPRINKLER-AND-IRRIGATION-SYSTEM INSTALLER; PLUMBER, MAINTENANCE; ETC.): Assembles, installs, alters and/or repairs pipe systems (metal, plastic, ceramic, composition, etc.) that carry water, steam, air, or other liquids or gases.	Journeymen + Apprentice =	55C303
	Apprentice Only	55C304
MECHANICS AND REPAIRERS (*EXCLUDE* INSTRUMENT REPAIRER): Perform minor repairs, tune-ups, overhauls, maintenance and major repairs of motor vehicles, machinery, mechanical equipment or buildings.		
MECHANIC, AUTOMOTIVE (TRUCK MECHANIC; GARAGE MECHANIC; ENGINE-REPAIR MECHANIC, BUS; MOTORCYCLE MECHANIC; ETC.; *EXCLUDE* DIESEL MECHANIC): Repairs and overhauls automobiles, buses, trucks and other automotive vehicles. May be designated according to specialty, such as Automobile Mechanic; Bus Mechanic; Differential Repairer; Engine-Repair Mechanic; Truck Mechanic.	Journeymen + Apprentice =	510083
	Apprentice Only	510084
MECHANIC, MAINTENANCE (MAINTENANCE MECHANIC, RECORD PROCESSING EQUIPMENT; REPAIR MECHANIC; FIXER; ETC.; *EXCLUDE* MILLWRIGHT): Repairs in accordance with diagrams, operation manuals, or manufacturer's specifications, machinery and mechanical equipment of an establishment such as cranes, pumps, motors, conveyor systems, and production machines.	Journeymen + Apprentice =	510433
	Apprentice Only	510434
ELECTROMEDICAL EQUIPMENT REPAIRER (BIOMEDICAL EQUIPMENT TECHNICIAN; VEHICLE INSTRUMENTATION TECHNICIAN; BIOMEDICAL EQUIPMENT TECHNICIAN; ELECTROMEDICAL-EQUIPMENT REPAIRER; DIATHERMY-EQUIPMENT REPAIRER; ELECTROMEDICAL SERVICE ENGINEER; ELECTROCARDIOGRAPH REPAIRER; ETC.): Tests, adjusts, and repairs electromedical equipment using hand tools and meters.		510243

EMPLOYMENT BY OCCUPATION

Occupations	Number of Employees	Office Code
ALL OTHER MECHANICS AND REPAIRERS (TELEVISION-AND-RADIO REPAIRER; DIESEL MECHANIC; MOTORBOAT MECHANIC; ELECTRONICS MECHANIC, COMPUTER; ETC.): Include other skilled repairers and maintenance mechanics *not* classified above. *Please identify on the supplement page at the end of this survey all significant occupations included in this* category.		519003
HELPER, TRADES (MECHANIC HELPER; PAINTER HELPER, SIGN; INSTRUMENT-TECHNICIAN HELPER; HEATING-AND-AIR-CONDITIONING-MECHANIC HELPER; MOTORBOAT-MECHANIC HELPER; ETC.): Assists one or more workers in the skilled trades by performing specific or general duties of lesser skill, such as keeping a worker supplied with materials and tools; cleaning working area, machinery, and equipment; assisting craft worker by holding materials or tools; and performing other unskilled tasks as directed by craft worker. Exclude workers, such as laborers, whose duties are limited or restricted to one type of activity or who do not assist another worker.		55B873
MAINTENANCE REPAIRER, GENERAL UTILITY (PLANT-MAINTENANCE WORKER; ETC.): Performs work involving two or more maintenance skills to keep the machines, mechanical equipment, and/or structure of an establishment in repair. This occupation is generally found in a small establishment where specialization in maintenance work is impractical. Duties may involve pipefitting, boilermaking, insulating, welding, machining, machine and equipment repairing, carpentry and electrical work, as well as planning and laying out of work relating to repairs; repairing electrical and/or mechanical equipment; installing, alining and balancing new equipment; and repairing buildings, floors, or stairs.		55B863
STATIONARY ENGINEER (BOILERHOUSE MECHANIC; HEATING-EQUIPMENT REPAIRER; BOILER MECHANIC; COOLING-SYSTEM OPERATOR; ETC.): Operates and maintains stationary engines and mechanical equipment, such as steam engines, air compressors, generators, motors, turbines, and steam boilers, to provide utilities, such as light, heat, or power for buildings and industrial processes.	Journeymen + Apprentice = Apprentice Only	55C913 55C914
STATIONARY BOILER FIRER (BOILER TENDER; BOILER OPERATOR; FIRER, MARINE; FIRER-WATERTENDER; STOKER; FIRER, PORTABLE BOILER; ETC.): Fires stationary boilers that supply heat, power, or steam to an establishment. May be required to hold license issued by state or municipality.		55C903
TRUCK DRIVER (MILK HAULER; GARBAGE COLLECTOR DRIVER; VAN DRIVER; FOOD-SERVICE DRIVER; ETC.; *EXCLUDE* DELIVERY AND/OR ROUTE WORKER): Drives truck or tractor trailer to transport materials to and from specified destinations such as railroad stations, plants, construction sites, or within industrial yards.		540003
INDUSTRIAL TRUCK OPERATOR (PACKAGE-LIFT OPERATOR; FORK-LIFT-TRUCK OPERATOR; ETC.): Drives gasoline or electrically powered industrial truck or tractor, equipped with forklift, elevating platform or trailer hitch, to push, pull, lift, stack, or tier merchandise, equipment, or bulk materials in establishment, warehouse, storage yard, factory, or at construction site.		55B573
CRANE, DERRICK, AND HOIST OPERATORS: Operate various kinds of cranes and hoists to lift, move and load materials, machines, and products.	Journeymen + Apprentice = Apprentice Only	55A823 55A824
RIGGER: Assembles rigging to lift and move equipment or material in such places as manufacturing plant, shipyard, or on construction project. Selects cables, ropes, pulleys, winches, blocks and sheaves, according to weight and size of load to be moved. Attaches pulley and blocks to fixed overhead structures; attaches load to hook with grappling devices, such as loops, wires, ropes, and chains.		55B543
MILLWRIGHT (*EXCLUDE* MAINTENANCE MECHANIC): Installs new machinery and heavy equipment according to layout plans, blueprints, and other drawings in an establishment and dismantles and moves machinery and heavy equipment when changes in plant layout are required. Uses a variety of hand tools, hoists, dollies, and trucks. May construct foundations for machines.	Journeymen + Apprentice = Apprentice Only	55B953 55B954
OILER: Oils and greases moving parts of friction surfaces of mechanical equipment, such as shaft and moving bearings, sprockets, drive chains, gears, and pulleys, according to specified procedures and oral instructions.		55C063

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EMPLOYMENT BY OCCUPATION

Occupations	Number of Employees	Office Code
ORDER FILLER: Fills shipping or transfer orders for goods from stored merchandise in accordance with specifications on sales slips, customer's orders, or other instructions. In addition to filling orders and indicating items filled or omitted, may keep records of out-going orders, requisition additional stock, or report short supplies to supervisor and perform other related duties.		55C083
TESTER (*EXCLUDE* LABORATORY TESTER): Performs tests on parts, products or materials before, during, or after processing to determine whether the operation and/or characteristics meet required standards and specifications. *Exclude* technicians actually engaged in technical work at a level which requires knowledge of engineering, mathematical, physical and life sciences comparable to knowledge acquired through technical institutes, junior colleges, or other formal post-high school training.		55Q573
DELIVERY AND/OR ROUTE WORKER (*INCLUDE* SALES ROUTE DRIVER; DELIVERER, PHARMACY; ETC.): Drives truck or other vehicle to deliver, sell, pick-up and display merchandise and products. Operates within a specified locality or over an established local route. May solicit new business. May collect money for items delivered. May gather coins and refill vending machines.		55A873
• *ALL OTHER PRODUCTION, MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, AND POWERPLANT OCCUPATIONS*		
ALL OTHER SKILLED CRAFT AND KINDRED WORKERS: Include all other skilled craft and kindred workers in production, maintenance, construction, repair, material handling, and powerplant occupations that predominantly require a thorough and comprehensive knowledge of processes involved in the work; the exercise of considerable independent judgment; usually a high degree of manual dexterity; and in some instances extensive responsibility for valuable product or equipment. Workers in these occupations usually become qualified by serving apprenticeships or completing extensive training periods. *Occupations should be counted as skilled if the specific vocational preparation required to perform them involves training or other preparation of more than two years. Please identify on the supplement page at the end of this survey all significant occupations included in this category.*		590013
ALL OTHER OPERATIVES AND SEMISKILLED WORKERS (FORMULA-ROOM WORKER; ETC.): Include all other operatives and semiskilled workers in production, maintenance, construction, repair, material handling, and powerplant occupations that are characterized by one, or a combination of the following requirements: 1) The exercise of manipulative ability of a high order but limited to a fairly well-defined work routine; 2) major reliance, not so much upon the worker's judgment or dexterity, but upon vigilance and alertness, in situations in which lapses in performance would cause extensive damage to product or equipment; 3) the exercise of independent judgment to meet variables in the work situation. This judgment is not based on a wide knowledge of the work field, and it is limited in nature and extent either (a) by application over a relatively narrow task situation; or (b) by having important decisions made by others. These occupations may require the performance of part of a craft or skilled occupation, but usually to a relatively limited extent. *Occupations should be counted as semiskilled if the specific vocational preparation required to perform them involves training or other preparation of more than 30 days up to and including two years. Please identify on the supplement page at the end of this survey all significant occupations included in this category.*		590023
ALL OTHER LABORERS AND UNSKILLED WORKERS (LABORER, GENERAL; WASTE SALVAGER; ETC.): Include all other laborers and unskilled workers in production, maintenance, construction, repair, material handling, and powerplant occupations that involve the performance of simple duties that may be learned within a short period of time and that require the exercise of little or no independent judgment. Characteristically, such occupations do not require previous experience in the specific occupation in question, although a familiarity with the occupational environment may be necessary or very desirable. The occupations in this group vary from those involving a minimum of physical exertion to those characterized by heavy physical work. *Occupations should be counted as unskilled if the specific vocational preparation required to perform them consists of anything from a short demonstration only, up to and including 30 days training or other preparation.*		590033

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EMPLOYMENT BY OCCUPATION

Occupations	Number of Employees	Office Code
SERVICE OCCUPATIONS **Include those workers in occupations concerned with the performance of services for persons that require either direct contact or close association with the individual; occupations concerned with the protection of individuals or of public or private property; occupations concerned with preparing and serving food and beverages; and occupations related to the cleaning of the interior and equipment of buildings, offices, stores, and similar places.**		
SUPERVISOR, NONWORKING--SERVICE ONLY (MANAGER, FOOD PRODUCTION; WAITER/WAITRESS, HEAD; FOOD SERVICE COORDINATOR; JANITOR, HEAD; SUPERVISOR, BUILDING MAINTENANCE; ETC.): Supervises and coordinates activities of workers in service occupations. Studies work schedules, and estimates employee-hour requirements for completion of job assignment. This classification does *not* include working supervisors (those spending 20 percent or more of their time at tasks similar to those of employees under their supervision).		440143
HOUSEKEEPER (FLOOR HOUSEKEEPER; INSPECTOR; ETC.): Supervises work activities of cleaning personnel to insure clean, orderly, attractive rooms in hotels, hospitals, educational institutions, and similar establishments. Assigns duties, inspects work, investigates complaints regarding housekeeping service and equipment, and takes corrective action. May purchase housekeeping supplies and equipment, and take periodic inventories. May screen applicants, train new employees, and recommend dismissals.		440193
JANITORS, PORTERS, AND CLEANERS: Keep building in clean and orderly condition. May have additional duties and responsibilities such as tending furnace and boiler, performing routine maintenance activities, notifying management of need for repairs and additions, and cleaning snow or debris from sidewalks.		
MAID (CLEANER, HOUSEKEEPING; ETC.): Cleans rooms and halls in such establishments as hotels, motels, restaurants, clubs, depots, beauty parlors and dormitories performing duties such as sweeping and mopping floors, vacuuming, dusting, washing walls, and sorting linens.		410033
ALL OTHER JANITORS, PORTERS, AND CLEANERS (CLEANER, WINDOW; LINEN-ROOM WORKER; HALL CLEANER; SHOWER ROOM ATTENDANT; WASTE COLLECTOR; ETC.): Include all other janitors, porters, and cleaners *not* classified above.		419003
GUARDS AND DOORKEEPERS (FIRE PATROLLER; NIGHT GUARD; ETC.): Stand guard at entrance gate or walk about premises of business or industrial establishment to prevent theft, violence, or infractions of rules; guard property against fire, theft, vandalism, and illegal entry; direct patrons or employees and answer questions relative to services of establishment; control traffic to and from buildings and grounds.		420003
FOOD SERVICE WORKERS (*EXCLUDE* CASHIER): Include workers in those occupations which are related to preparing and serving food and beverages. *Include* occupations such as Cook; Cafeteria Worker; Waiter/Waitress; Kitchen Worker; etc.		
WAITER/WAITRESS (*EXCLUDE* COUNTER ATTENDANTS): Serves food and/or beverages to patrons at tables. Usually takes order from patron and makes out check. May set table with linen and silverware and take payment from patron. May serve customers at counter as well as table. *Exclude* workers who only work at counters.		430093
COUNTER ATTENDANT, LUNCHROOM, COFFEE SHOP, OR CAFETERIA (WAITER/WAITRESS, COUNTER; CANTEEN OPERATOR; FOUNTAIN SERVER; ETC.): Serves food to diners at counter or from a steam table. Counter Attendants who also wait tables should be reported under Waiter/Waitress.		430103

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EMPLOYMENT BY OCCUPATION

Occupations	Number of Employees	Office Code
DINING ROOM ATTENDANT, BARTENDER HELPER, OR CAFETERIA ATTENDANT (COFFEE SERVER, CAFETERIA OR RESTAURANT; CAFETERIA ATTENDANT; TABLE ATTENDANT, CAFETERIA; WAITER/WAITRESS, CAFETERIA; TABLE SETTER; ETC.): Performs any combination of the following duties to facilitate food service: Carries dirty dishes from dining room to kitchen. Replaces soiled table linens and sets tables with silverware and glassware, etc. Replenishes supply of clean linens, silverware, glassware, and dishes. Supplies services bar with food, such as soups, salads, and desserts. Serves ice water and butter to patrons. May also serve coffee to patrons. May wash tables.		430033
COOK, INSTITUTION (COOK, PSYCHIATRIC HOSPITAL; ETC.): Prepares and cooks family-style meals for institutions, such as schools, hospitals or cafeterias. Usually prepares meals in large quantities rather than to individual order. May cook for employees of office building or other large facility.		430163
COOK, SHORT ORDER AND/OR SPECIALTY FAST FOODS (HAMBURGER-FRY COOK; COOK, GRIDDLE; ETC.; *EXCLUDE* COUNTER ATTENDANT): Prepares and cooks to order all types of food requiring only a short preparation time. May take order from customer and serve patrons at counters or tables. May prepare specialty foods such as pizzas, fish and chips, and tacos. May be designated according to type of food prepared, such as hamburger-fry cook; pizza cook; or sandwich maker. Additional duties may include carving meats, making sandwiches, and brewing coffee.		430113
BAKER, BREAD AND/OR PASTRY (PIE MAKER; COOK, PASTRY; NIGHT BAKER; ROLLS BAKER; CAKE MAKER; ETC.): Prepares and bakes bread, rolls, muffins, biscuits, cakes, pies, cookies, and puddings according to recipe by measuring and mixing ingredients, shaping and molding dough into desired shapes, placing pans of dough in oven, etc.	Journeymen + Apprentice = Apprentice Only	430013 430014
BUTCHER AND/OR MEAT CUTTER (MEAT CARVER; ETC.): Include workers in hotels, restaurants, or wholesale or retail trade concerned with cutting and otherwise preparing meat for cooking or sale.	Journeymen + Apprentice = Apprentice Only	430043 430044
PANTRY, SANDWICH AND/OR COFFEE MAKER (SALAD MAKER; COFFEE-URN ATTENDANT; PANTRY GOODS MAKER; ETC.): *Pantry Maker*: Prepares salads, appetizers, sandwich fillings and other cold dishes. *Sandwich Maker*: Prepares sandwiches to individual order of customer. *Coffee Maker*: Makes coffee, tea or hot chocolate.		430153
KITCHEN HELPER (COOK HELPER, DESSERT; GARBAGE PORTER; KITCHEN HAND; DISHWASHER, HAND; DISHWASHER, MACHINE; COOK HELPER, VEGETABLE; SILVERWARE WASHER; UTILITY HAND; ETC.): Performs tasks to maintain kitchen work areas and restaurant equipment and utensils in clean and orderly condition.		430073
ALL OTHER FOOD SERVICE WORKERS (RESEARCH WORKER, KITCHEN; ANALYST, FOOD AND BEVERAGE; FOOD-TRAY ASSEMBLER; FOOD ASSEMBLER, COMMISSARY KITCHEN; WINE STEWARD/STEWARDESS; ETC.): Include all other food service workers *not* classified above.		439003
WASHER, MACHINE AND/OR STARCHER (WASHER, BLANKET; ISOLATION-WASHER; WET CLEANER, MACHINE; STEAM CLEANER, MACHINE; ETC.): Tends one or more machines that wash commerical, industrial, or household articles, such as garments, blankets, curtains, draperies, fine linens, and rags.		530043
LAUNDRY PRESSER, MACHINE (LAUNDRY WORKER; ETC.): Tends pressing machine to press washed wearing apparel, such as uniforms, jackets, aprons, and shirts; and household linens. Machine may be designed for a specific article, such as handkerchief or shirt. May perform several tasks to finish household linens, such as sheets, pillowcases, tablecloths and napkins.		530163

EMPLOYMENT BY OCCUPATION

Occupations	Number of Employees	Office Code
DRY-CLEANING-MACHINE OPERATOR (DRY CLEANER; DRY CLEANER, RUG; ETC.): Operates drycleaning machine to clean garments, drapes, and other materials that cannot be washed in water without shrinkage or damage to fabrics, utilizing knowledge of cleaning processes, fabrics, and colors to determine procedure.	Journeymen + Apprentice = Apprentice Only	530063 530064
PRESSER, MACHINE (PANTS PRESSER; STEAM FLATTENER; IRONER, MACHINE; ETC.; *EXCLUDE* LAUNDRY PRESSER, MACHINE): Operates pressing machine to smooth surfaces, flatten seams, or shape articles, such as garments, drapes, slipcovers, and hose, in manufacturing or drycleaning establishments. Uses hot-head presser or steamtable. May use puff iron and hand irons to finish.	Journeymen + Apprentice = Apprentice Only	530153 530154
GARDENERS AND GROUNDSKEEPERS (GREENS PLANTER; CARETAKER, GROUNDS; LANDSCAPER; LAWN-SERVICE WORKER; ETC.): Maintains grounds of public or private property, using hand/power tools or equipment. May perform any combination of the following tasks: Mowing, trimming, planting, watering, fertilizing, digging, raking, and sweeping; also, painting or repairing fences, benches, walks or driveways, and/or shoveling snow. May plan and execute small-scale landscaping operations. May dig and prepare graves. *Exclude* Park Caretakers and Camp Ground Caretakers who disseminate information to the public and patrol public parks to enforce rules and regulations and to detect fires.		55T473
CUSTOM SEWER: Makes, alters, and repairs garments, such as coats, corsets, dresses, or skirts, according to pattern or customer specifications, using sewing machine or by hand sewing.		55C653
ALL OTHER SERVICE WORKERS (ELECTROLOGIST; HOME HEALTH AIDE; ESCORT, BLIND; AIR DEODORIZER SERVICER; ETC.): Include all other service workers *not* classified above. *Please identify on the supplement page at the end of this survey all significant occupations included in this category.*		490003

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OVERALL TOTAL OF EMPLOYMENT
(Sum of non-shaded boxes)
(This overall total employment should agree with Item D on page 1.)

SUPPLEMENT TO "ALL OTHER" CATEGORIES

Please use the space below to identify workers reported in any "All Other" category who are in occupations that are numerically important in your operation or that require substantial training.

Office Code of "All Other" Category in which Workers are Reported	Job Title and Short Description of Job Duties	Number of Employees	For Office Use Only

OFFICE USE ONLY	Schedule Number	Survey Code	SIC	Unit Total Employment	Auxiliary Unit Code	Reviewed By	Date

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